



For a port to compete in today's tough global market its management team need to focus on key strategic and financial factors. Of equal or even greater importance, however, is the health and safety of port staff and site contractors.

An unblemished safety record and detailed health and safety procedures help to ensure peace of mind for your workforce, and aid with both staff recruitment and retention. Conversely, a poor safety record and ill-conceived processes are not only detrimental to personnel, but can result in negative publicity, legal cases, and fines for safety breaches which have the ability to severely affect your bottom line.

The key to safety

When implementing a health and safety solution a port should consider its people, processes, and technology and ensure they are aligned. Even with the best technology, you can't just flick a switch and expect a system to take care of your people. There will always be a human element. The key here is to ensure that technology-backed processes to minimize hazards are put in place and followed by a safety conscious workforce.

Master Terminal's yard safety benefits:

- Labor On Block functionality available in all areas of the terminal including straddle rows, block stack areas including pre-trip inspection (PTI), and container inspection areas
- Machine lockouts restrict machine operator's access to cargo and terminal areas
- Radio telemetry allows machine operators to access the Master Terminal platform via Windows-based handheld units
- Data audits capture the names of internal users and external organization stakeholders on the port.
 This information is integrated with external partner's systems enforcing their responsibilities on the port.



The technology

A terminal operating system (TOS) is at the core of a port's operation. Primarily it allows cargo movement and storage to be handled and controlled more efficiently. A TOS also enables you to make better use of your assets, labor and equipment, plan your workload, and get up to the minute information which allows for more timely decision making. Therefore it makes sense that your health and safety system interfaces with your TOS to draw upon the data available, or that your TOS includes a health and safety component.

Separating man and machine

A critical safety aspect that can be mitigated with the use of a TOS is separating machinery and labor in the yard. Port staff and third-party contractors will at times need to visit terminal areas where heavy machinery is used. For instance, a technician or electrician may need to perform yard maintenance operations in transformer rooms that are embedded within a block stack. It is essential that this contractor be able to undertake their work safely, without heavy machinery such as straddle cranes operating in close proximity. Port staff who operate this machinery often have limited views of the yard and need to receive notifications warning them of the areas where they can't operate.

The Solution – Labor On Block

Through working closely with local ports, we developed an understanding of real-world safety issues. This knowledge was essential in the development of Master Terminal's Labor On Block functionality. The guiding principal is that when 'Labor is On the Block', machinery is not allowed to enter an area.

How Labor On Block yard maintenance works:

The contractor or staff member reports to port admin staff informing them of the reason for their visit, the location in the yard where they will be operating, and the duration they will require to undertake their work. (For instance, a reefer technician performing maintenance in a transformer room requiring two hours.)

- A port administration staff member then applies Labor On Block to the relevant terminal area. They do this by demarcating in the TOS where machinery cannot operate.
 An expiry date and time is put on the Labor On Block.
- Once Labor On Block has been entered into the TOS, the contractor is informed that they can proceed to the area to complete their work.
- Any machinery tasks, such as picking up or placing down cargo, are held.
 For instance, if a machine operator has a task scheduled in the terminal area that has been marked as
 Labor On Block then they will be sent a warning message on their in-cab screen informing them that they should not enter the area.
- Ports can supplement this by using a hazard warning light system.
 For example, Port of Otago separate their yard into four quadrants, each with hazard lights. If Labor On Block is applied in one of these four areas, then the corresponding hazard lights flash red to provide visibility to not only machine operators but all port staff on the ground.
- The contractor completes their yard maintenance activities.
- If the contractor has not completed their maintenance activities within the time initially allocated, then a notification is sent to tell them that the Labor On Block has expired. If they are still working in that area they will need to contact port staff in order to reissue the Labor On Block.
- The TOS records historical data, detailing the reason Labor On Block was applied, so if any issues arise then the system can be reviewed and improvements made.

For information on yard operations functionality in Master Terminal, visit: *jadelogistics.com*



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**