



MUMBAI **MICT**

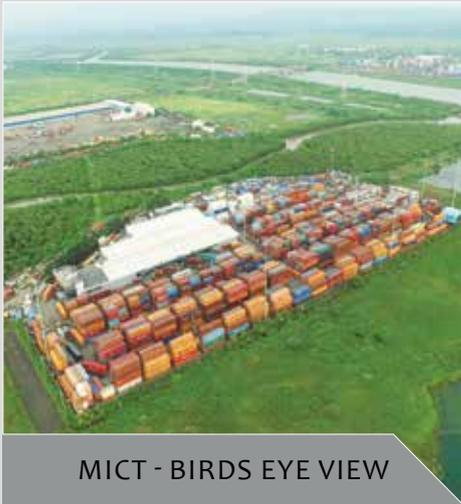
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# NEWSLETTER

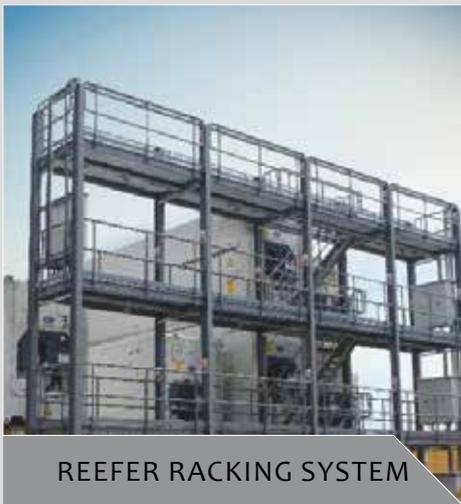
## MUMBAI INTERNATIONAL CARGO TERMINAL

ISSUE I

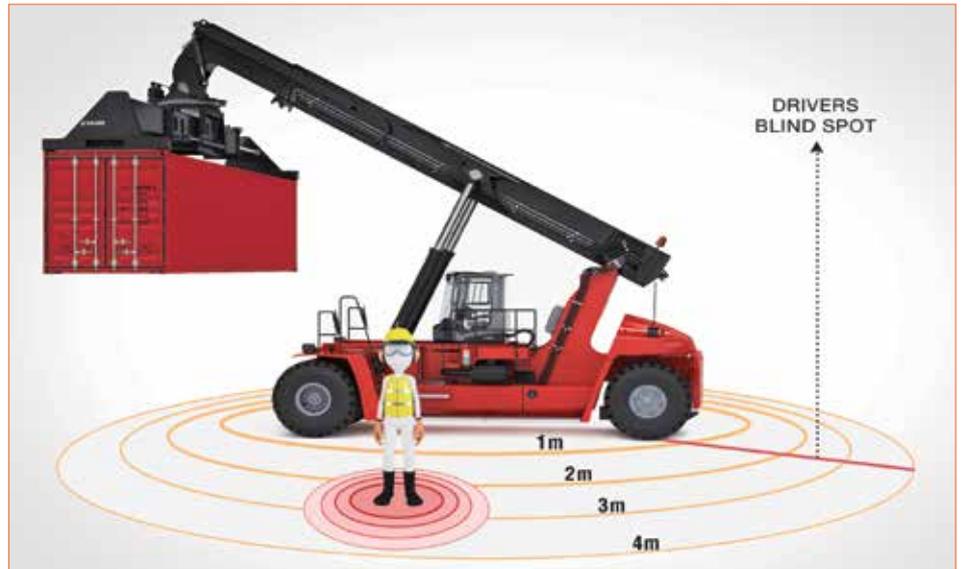
# Safety Embedded In Our Systems



MICT - BIRDS EYE VIEW



REEFER RACKING SYSTEM



In an effort to promote a safe and secure working environment, Mumbai International Cargo Terminal has installed a man-machine interface (MMI) system.

MMI is a warning system designed to help prevent collisions between equipment and personnel working in close proximity to each other.

The alerting system consists of eight radio frequency (RF) antennas, which are located on a vehicle or machine operator without restricting operational views or machine controls. These antennas create a 360° RF safe zone of radius 8 to 10 m. Every person in the facility is required to wear a safety jacket with an embedded radio frequency identification (RFID) chip. The 360° zone means that these RFID transponders can be detected even in blind spots where the operator or vehicle-mounted cameras may not be able to see. The unit gives an automatic audible and visual



alert to the equipment operator when anyone wearing such a jacket breaches the equipment's safe zone. If the detected person does not leave the safe zone, then MMI increases the volume of the audible alert.

Further, the MMI system logs all alarms, and these records can be used to review near misses and collisions to evaluate and improve operational procedures ■

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# MICT Empty Depot At NHAVA SHEVA

**C**ontainer arriving in a market must be returned to liners that brought them - either empty or full. But longer the delay in doing so, higher would be the cost of keeping those containers idle and empty. Repositioning containers as soon as they are destuffed is critically important for a number of reasons. Both from a logistics as well as financial points of view, the delays in empty movements involve tangible costs which is accounted by the shipping liner and shippers as well.

Traditionally, shipping lines have been operating by sending the import laden boxes to consignees through a Container Freight Station (CFS) or Inland Container Depot (ICD), expecting them to be returned either loaded (with export cargo) or empty, within an agreed time-frame. However with increasing volumes of trade, imbalance in EXIM trade volumes, logistic complexity due to longer average detention time for empty boxes, empty container logistics has been lamenting for effective solutions. A standard 20-ft container (TEU) today costs about \$2,000 to manufacture, while a 40-ft container (FEU) costs about \$3,000. Therefore, a TEU costs \$1.71 per cubic feet to manufacture, while a FEU costs \$0.80, which explains the preference for larger volumes of boxes, in order to achieve economies of scale.

Effective repositioning of empty containers, however demands a multi-tiered response and has to be seen as liner diversified asset management. During 1990's, when lines and shippers alike, started looking at micro economics, reduction of inventories, tweaking supply chains and recasting global distribution centers, transportation costs and liquidity of financial



MICT EMPTY YARD GATE

resources became matters of serious concern for both. Why carry 1,000 MTs when you can have 10MT x 100 TEUs spread over comfortable periods? So the next thing was shipping non-traditional cargoes in containers and placing them at convenient places for further

distribution.

This gave rise to extra maintenance of empty boxes. Shipping lines calculate empty boxes unproductive time in "idle days", which should ideally be nil. However, most of the lines have on an average 10 days improper and unsafe equipment, inadequate manpower and very poor communication systems. Under developed infrastructure results in serious problems of water clogging during monsoons.

This opens an opportunity of offering superior box management services to the harassed shipping lines. Typically a CFS or ICD can take care of empty boxes, repair them and deliver them to the shipper. Good quality in management of empty depot will offer lines a reduced idle time, efficient tracking systems and repairs.

The empty depot is located 13 kms from MICT and the route does not have toll charges. Majority of the road is 18 m wide with light traffic. The depot is suitably located in the warehousing zone which exits to all commercial areas and connects to all major highways connecting to Mumbai Goa road / Mumbai - Panvel junction. The port is 17 Kms from the Depot ■

## MICT OFFERS

- 01** Transportation from CFS to Depot
- 02** Survey / Inspection of box after reaching Depot
- 03** Washing and cleaning of boxes for cargo worthiness
- 04** M&R services as per IICL Standards
- 05** Transportation to the port for exporting empty boxes as per line's requirements
- 06** Stacking and storage of boxes for quick FIFO deliveries
- 07** PTI of Reefer Containers
- 08** On Line Reporting system to principals

# Reefer Racking System At Mumbai International Cargo Terminal

**M**ICT is constantly innovating as per the market dynamics and hence created a reefer racking system on similar lines as you get in the gateway ports and terminals. It is the only CFS at Nhava Sheva with this system.

The reefers will be stacked in racks, thus they can share the electrical infrastructure and require less land. Reefer racks, a relatively new means of storage, offer advantages over other strategies.

If the refrigerated cargo industry grows over the next decade as expected, there will be more reefers in use and a greater demand for reefer infrastructure. Based on the demand, we have provided a total integrated solution for managing refrigerated containers carrying any type of reefer cargo, ranging from

fresh fruit, fish, meat, medicines, poultry, pharma, confectionary etc. Combining advanced wireless monitoring technology and control software, our reefer raking system gives us the power to track, control and record the condition of all the reefer containers in our CFS in real time.

The new system was necessary after receiving input from the trade and after analysing the benefits that it will eventually provide for operational excellence

Client satisfaction and the safety of the cargo due to the additional features were the sole drivers for this process.

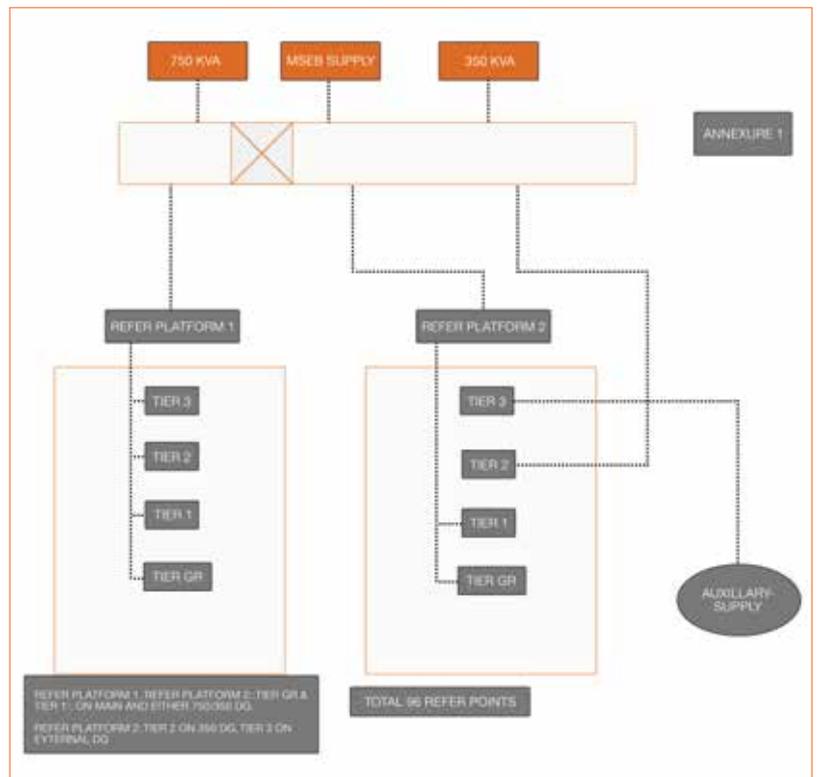
The reefer racking system has optimised operational performance at MICT.

## BENEFITS FOR THE END USERS

- Ease of sampling from authorities
- More control
- Simple 'plug and play' operation for virtually all reefer box types
- Real-time visibility of reefer box status helps improve quality, safety and traceability for perishable cargo
- Fast response to and correction of incidents
- Avoidance of undetected reefer failures and rapid response to events with real-time alarms
- Reduce capital outlay with managed service options ■



REEFER RACKING SYSTEM





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YEARS OF EXCELLENCE



**MUMBAI  
INTERNATIONAL  
CARGO TERMINAL**

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