

Yardeye GmbH is a young organization that operates internationally with a focus on port automation and safety in container terminals. By Yardeye's unique GNSS and RFID technology, terminals are able to identify and track cranes, vehicles and personnel for a safe and efficient intermodal yard.

## ABOUT US



## SAFE. TIME.

Safety is our highest goal. The Yardeye Anti Collision System prevents suspended loads above vehicles and people. The redundant approach increases the safety, reliability and availability of the complete automation solution.

Once safety is ensured, the performance is maximized. The Yardeye system allows parallel operation between fully automated equipment and personnel in the same working environment. Through an open interface, we make all data available for analysis. This enables intelligent terminal management.

# Yardeye

Safe. Time.



## OUR HISTORY

By accident, an underground collision avoidance solution was presented to Global Container Terminals, who identified the potential quickly. After further development and a successful first project, Yardeye entered the market in 2017.



**Allow all workers  
to come home  
safely**

# PRODUCT FEATURES

## COLLISION AVOIDANCE



The Crane Collision Avoidance System is the core safety component of Yardeye. The sensor fusion of Yardeye's GNSS and RFID technology system prevents the crane trolley from moving over any vehicle or personnel. Constantly, crane trolley and gantry movements are adjusted or stopped if required.

## RTLS GNSS POSITIONING



Yardeye's Real Time Locating System (RTLS) relies on a sensor fusion of GNSS and RFID Positioning. A Differential Global Navigation Satellite System (DGNSS) and Real-Time Kinematics (RTK) system is installed for primary positioning purposes. This technology tracks cranes and vehicles with an accuracy up to 3cm.

## DIGITAL TWIN



Yardeye's extensive fronted visualization. The Yard Map is an interactive visual representation of the terminal and all units equipped with a Yardeye system. Object positions are visualized for the purpose of asset tracking, historical analysis and basic troubleshooting. A tool for operators, foremen and management in 2D and 3D.

## RTLS RFID POSITIONING



The second technology employed is the RFID system. It uses different radio frequencies to provide redundancy and take advantage of the different signal characteristics of each frequency. By RFID technology, cranes, vehicles and personnel can be tracked. In order to avoid collisions, halos are generated around them. When overlapping, the crane is prompted to stop.

# REFERENCES

ADZ  
GLENCORE,  
SAN JUAN DE  
NIEVA, ESP

DP WORLD  
VANCOUVER,  
CAN

CSX  
INTERMODAL  
FAIRBURN,  
ROCKY  
MOUNT &  
WINTER  
HAVEN,  
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