

# Reach Stacker

## Case Study



### ZoneSafe Reach Stacker

Many large mobile machines used in the Port environment have caused a number of unfortunate accidents around the world in which people have been killed or severely injured when the driver was unable to take unavoidable action.

Working towards the customers goal of Zero fatalities and Zero Accidents, a ZoneSafe A4 system was installed on a RS45-31CH Reach Stacker. This aids the driver by increasing the time available to take action and to minimize the risk of accidents.

ZoneSafe created an invisible zone 360 degrees around the vehicle to a distance of 9 meters from each antenna. Anyone who enters the Zone – wearing a safety transponder- is automatically detected and the in cab control unit immediately emits an Audio /Visual warning to the driver so avoidable action can take place. External Alarms were also installed which enabled the pedestrian to be alerted and take avoidable action.

“The ZoneSafe system provided a very effective and stable Zone around the Reach Stacker, whether carrying a container or not. Drivers and Operational staff concluded that it would certainly lower the risk of a Reach Stacker colliding with personnel (wearing a safety transponder)”



ZoneSafe Zone around a RS45-31CH Reach Stacker

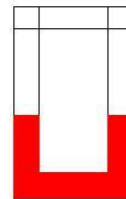
The devices worn by personnel are light-weight credit card sized, ultrasonically welded Active Transponders. The Transponders contain a battery which is capable of 2 million transmits. A rechargeable version is not available as recharging up to 3000 transponders per site would be unmanageable. ZoneSafe Transponders are factory refurbishable. The Active Transponders do not suffer from orientation “dead spots” like passive transponders and operation is not effected by the weather or when placed behind the body.



85mm x 54mm x 7mm

In this instance study the ZoneSafe Control Unit utilised a 2” Touch Screen display allowing the operator to quickly identify the indicated location of where the person has been detected. The touch screen has multiple functions :-

- Press Screen for Authorised approach
- System Status
- Ignition Status
- Driver Transponder Status
- One or more pedestrian detection
- Initial system Calibration



Screen Layout of In Cab Controller

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