ZoneSafe®
Proximity Warning & Alert Systems

A Safer Workplace, A Safer Workforce

Warehouse, Logistics & Distribution - Waste & Recycling - Paper & Packaging - Manufacturing - Ports &Terminals - Construction - Mines & Quarries - Aviation

> "A simple product and much more user friendly than anything else we'd seen. It didn't have the same blindspots as some other products."

Nick McCrea - Sales Manager
Grays Forklift Services Ltd, UK

> "We consider this a valuable and reliable tool which will significantly increase safety in our daily operations."

Laurids Uglvig - Chief Operating Officer
APM Terminals – Callao, Peru

> "It has clearly improved the awareness and confidence of both truck operators and pedestrians."

Dave Ward - Logistics Manager
DS Smith Packaging - Featherstone, UK

ZoneSafe®
Proximity Warning & Alert Systems

Build a Safer Worksite For a Safer Workforce

Accidents occur on work sites throughout the world where pedestrians work in close proximity to vehicles.

Reducing collision risks and preventing accidents to people and assets on work sites is an essential health and safety requirement. However, reducing the risk of collision is not always straight forward, especially when industrial vehicles carry obstructing loads, approach from around corners of buildings and structures, or have blind spots.

With its range of proximity warning and alert systems, and use of innovative identification and detection technologies, ZoneSafe significantly reduces the risk of accidents, injury and damage to people and assets on work sites.

Why Choose ZoneSafe:

- People, Vehicle, Asset & Hazard Protection Experts
- Reduces the Risk of Accidents, Injury & Damage
- Proven & Reliable Technology
- Worldwide Distributors & Globally Supported
- Product Advice - Standard & Customisable Solutions
- Support & Training
- Flexible Purchase Options

Who Are We?

Designed and manufactured in the UK by Avonwood Developments Ltd, ZoneSafe is a leading Proximity Warning and Alert System, which is supplied and supported to a global customer base.

Creating safer places to work is one of our core values, and since 1989, Avonwood have specialised in identification and detection systems for people, assets and vehicles in the workplace.

With over 25 years experience and knowledge of product development and manufacturing, Avonwood has upheld and maintained its accreditation with the internationally recognised Quality Management System ISO 9001:2015.

How Does It Work?

Zonesafe uses radio frequency identification (RFID) technology to create detection zones around vehicles, assets, crossing points and walkways.

Active tags can be worn by personnel, fitted to assets or set up around hazards. Tags are identified by the system when they enter the detection zone. This triggers an audible visual alert, warning vehicle operators of the tags close proximity to the vehicle.
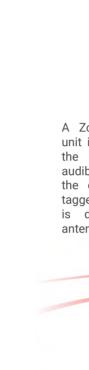
ZoneSafe tags do not require line of sight and will be detected regardless of obstructions, blind spots or poor visibility.

Our technology also offers event data and near miss reporting via onboard data logging and our Software as a Service (SaaS) platform MyZoneSafe.

- 360 Degree Detection
- Single or Multiple Detection Zones
- 3-9 Metre Detection Range
- Detection Regardless of Obstruction
- Event Data and Logging
- SaaS

ZoneSafe can be fitted to any size or type of vehicle. Additional antennas can be added to increase the detection area as required.

360° Detection

A ZoneSafe in-cab control unit is fitted within reach of the vehicle's operator. An audible visual alarm alerts the operator every time a tagged person or object is detected entering the antenna's detection zone.

ZoneSafe detection antenna(s) are fitted to the forklift truck*. This creates a 3-9 metre 360° continuous detection zone around the vehicle, that detects personnel or objects with a ZoneSafe tag.

ZoneSafe active RFID tags are worn by all personnel or fitted to assets. The tag can be placed in our ZoneSafe hi viz jacket, clipped to a lanyard, fitted to a hard hat, worn on your belt or simply placed in your pocket.

3-9 metre detection zone emitted from the antenna

Detection Zones

ZoneSafe Proximity Warning & Alerts Systems feature a range of different detection zones to suit the type of vehicle and your specific requirements.

Single or multiple detection zones can be configured to cover the whole vehicle or set up to cover specific areas such as:

- Swing Areas
- Arms, Attachments & Buckets
- Blind Spots

Unlike other systems and technologies such as passive RFID, cameras and blue lights, ZoneSafe offers a fully 360° detection system that will detect tags through obstructions and around corners.

360° Detection

An excavator can be fitted with multiple detection zones to cover key areas of the machine including rear slewing area, operator blind zones and arm or bucket.

Single Zone Detection - most commonly used on forklift trucks and small plant.

Large vehicles such as reach stackers can be fitted with multiple detection zones to cover key areas of the machine including the rear turning area, blind zones and spreaders.

Vehicle To Person Detection

ZoneSafe Vehicle to Person Alert is our standard application - helping to prevent collisions between industrial vehicles and pedestrian workers when they work in close proximity to each other.

Whether it's a forklift truck or an excavator, the system is designed to fit any type of vehicle large or small. Additional antennas can also be fitted to create larger detection zones when required.

Every time a pedestrian worker enters the detection zone around a vehicle, the audible visual alarm on the in-cab control unit alerts the driver of pedestrian worker's close proximity. Optional vibrating tags will also warn the pedestrian about approaching vehicles.

The system logs events and can provide reports on any near-miss occurrences using MyZoneSafe, our software as a service (SaaS) platform for identifying, analysing and reviewing events.

The ZoneSafe System

The ZoneSafe Vehicle to Person Alert System is made up of the following equipment:

- Antenna(s) - A
- In Cab Control Unit - B
- Driver Tag(s) - C
- Pedestrian Tag(s) - D

Adjusting the detection zone range of the antenna has never been so easy when you use the ZoneSafe app. Download it from the Play Store (android) or Apple App Store (iphone).
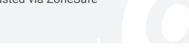
A.   B.   C.   D.

Features:

- Adjustable detection zone range 3 - 9 metres
- Detect pedestrians in close proximity to moving vehicles
- Link with MyZoneSafe via WiFi
- Two-way feedback using audible visual warning & vibrating tags

Features:

- New robust weatherproof industrial design
- Audible and visual warning alarm
- Detection range can be adjusted via ZoneSafe phone app
- Increase detection area with multiple antennas
- Detection range can be adjusted via ZoneSafe phone app

Vehicle To Vehicle Alert
Much the same as Vehicle To Person Detection, this application detects other vehicles instead of people. However, both systems can be used at the same time, ensuring your work site is the safest it possibly can be. All drivers will be alerted via the in-cab control unit of any approaching vehicles entering the detection zone.

Walkway / Crossing Alert
Using audible visual warnings, activation of control signals, barriers and gates, ZoneSafe Walkway and Crossing Alert Systems offer the ability to provide right of way or segregation to prevent collisions between approaching vehicles and pedestrians at crossing points and walkways.

Asset Protection / Hazard Alert
ZoneSafe Asset Protection and Hazard Alert Systems offer an audible visual warning to vehicle operators when there is a risk of collision with fixed assets or encroachment into a 'no go' or hazardous area.

Vehicle Access Control
Hands-free automated access for roller doors and barriers, Vehicle Access Control can also be linked with all our ZoneSafe applications. Controlling access to authorised vehicles will reduce the risk of injury to staff and visitors, while supporting security and preventing loss and damage to all vehicles.

Personnel Access Control
Personnel Access Control provides restricted or controlled access through doors, turnstiles or gates for pedestrians. There is no need to present the tag to the reader, leaving the pedestrian hands-free – helpful when carrying equipment or pushing trolleys. The system can be linked with other applications including MyZoneSafe Data Management giving you the ability to manage access to different areas of your site.

MyZoneSafe Data Management
Take control of ZoneSafe's range of applications using data management software. Manage access control, tag battery status, track personnel and vehicle movement, and identify near-miss occurences. For more information on managing your site safely with MyZoneSafe Data Management, see page 17.
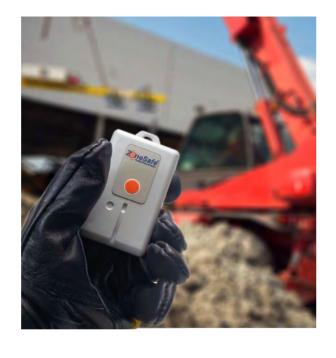
Tags

ZoneSafe systems use Active RFID tagging technology that offers a number of benefits and advantages over other proximity warning systems.

Our ZoneSafe technology provides fast, reliable and accurate data exchange between tags and readers without any limitation on the number of tags in operation - essential for a safety warning system.

The detection of the tag is automatic and does not require line of sight or intervention from the user. Enabling complete hands free operation, ZoneSafe tags are not affected by obstructions such as somebody standing in front of them, or environmental factors like adverse weather.

ZoneSafe tags can be used to detect people, protect assets, create exclusion zones around hazards and can also offer access control through doorways, barriers and turnstiles.

Features:

- Rugged tamperproof sealed tag units
- Tags are not affected by obstructions such as people, racking or boxes
- Automatic and multiple tag detection
- Each tag can be uniquely identified and linked to individual people

Tag Types

1. **Rechargeable Tag (Driver & Pedestrian)**
   The rechargeable tag uses the same form factor as the standard tag, with the ability to be charged using a wireless charger. The battery can be completely recharged within two hours and lasts up to 3 months between charges. An optional belt clip can also be supplied for pedestrian tags.

2. **VibraTag (Driver & Pedestrian)**
   VibraTags provide short bursts of vibration to alert the wearer when a vehicle is approaching, or if they are too close to a vehicle. VibraTags can also be charged using a wireless charger. The battery can be completely recharged within two hours and lasts up to 3 months between charges. An optional belt clip can also be supplied for pedestrian tags.

3. **Cone Tag**
   Cone Tags offer simple and fast deployment to create detection zones or 'no go' areas by placing multiple Cone Tags around an asset or hazard. When vehicles fitted with ZoneSafe approach, the Cone Tag is automatically detected and an alarm in the cab warns the driver of their close proximity.

4. **Atex Tag (Pedestrian)**
   The Atex Tag is an active RFID tag that works in the same way as other tags on this page. Certified for use in explosive environments (Atex Zone 2/22) for gas and dust, this tag offers additional safety whilst working in close proximity to moving vehicles.

Tag Tester

The ZoneSafe Tag Check Point, or Tag Tester, enables users to quickly and easily check the status of their tags. A simple LED indication panel on the unit indicates to the user the status of their tag and confirms if it is working correctly.

Additionally, the tag checker can be used to provide restricted or controlled access through doors, turnstiles and gates, ensuring only authorised and operational tags are in the work area.

The unit is network ready allowing it to connect over a network and talk to ZoneSafe Insight. This will provide additional reporting and visibility of tags - simplifying tag management.

Features:

- Robust industrial design
- LED indication panel
- Check tag status
- Integrate with access control
- Network option
- Connect to ZoneSafe Insight

Vehicle Detector Unit

Ensure the safety of your staff by detecting oncoming vehicles with the ZoneSafe Vehicle Detector Unit (VDU).

When vehicles and pedestrians work in close proximity to one another and you are unable to segregate the two, there is a significant risk of injury. ZoneSafe VDU is a Proximity Warning Alert System (PWAS) that detects moving vehicles.

Installing the unit at a pedestrian crossing, along a walkway or near a door, for example, can provide urgent information to pedestrians by linking to projectors or electronic signage, warning them of an approaching vehicle.

The system can also open or close barriers so that the vehicle can pass through, or lock a gate ensuring pedestrians cannot gain access when a vehicle approaches. The VDU can also be used as part of a system to limit vehicle speed or even set up to interact with traffic lights.

Vehicle Detection Unit (VDU)

Flashing Signs   Traffic Lights   Projectors   Gates / Barriers   Speed Zoning

Features:

- Activate external alarm warning of approaching vehicles
- Activate warning signs, projectors & traffic lights
- Automatically open and close vehicle barriers or doors
- Automatically slow vehicles down (3rd party integration required)
- Track and locate vehicle movement (using MyZoneSafe)

Qu-Box

During normal working practice, ZoneSafe will detect pedestrian workers in close proximity to the vehicle.

When workers need to carry out duties adjacent to vehicle movements, the Qu-Box provides a non-detectable zone within the working area that prevents workers tags from triggering the ZoneSafe pedestrian detection alarm.

Once the worker leaves the Qu-Box zone, tags will once again be detected by any vehicles in close proximity and trigger the alarm.

Features:

- Eliminates unnecessary false alarms
- 3 - 9 metre safe working zone
- Easy to set up

MyZoneSafe Data Management

Increasing awareness and improving site safety should be at the forefront of every worksite. Identifying, monitoring and improving areas of risk can often prove difficult - especially when incidents such as near miss occurrences go unreported.

Using identification technology, data logging, GPS and management information, ZoneSafe improves awareness of collision risks and helps keep workers and assets safe in the work place.

MyZoneSafe is our cloud-based software as a service platform (SaaS) for work site managers and supervisors. Using recorded event data from ZoneSafe devices, MyZoneSafe lets you identify near miss occurrences, analyse trends, create reports and manage pedestrian vehicle incidents.

Tag management is also made easy with the ability to check battery levels, track personnel or vehicle movement, restrict access and more.

Features:

- Analyse and compare events
- Track vehicles and GEO-tag near miss occurences
- Identify trends
- Create custom reports
- Manage tags
- Access data from any web browser

Distributor Network

Avonwood and its range of ZoneSafe proximity warning and alert systems are committed to building strong relationships with both customers and partners alike in order to encourage mutual success.
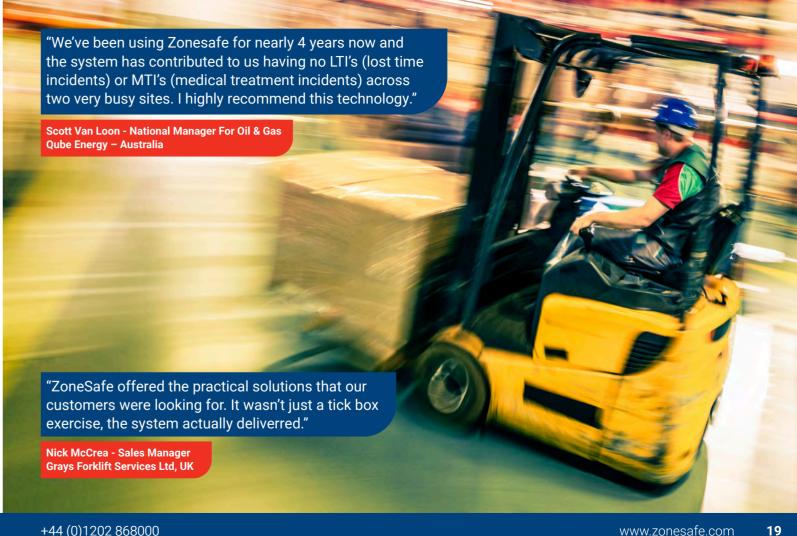
Avonwood believes in working with global partners and distributors who are able to work with and support customers locally.

If you are interested in being part of our distributor network, please contact us.

- ZoneSafe Distributors Around the World

"We've been using Zonesafe for nearly 4 years now and the system has contributed to us having no LTI's (lost time incidents) or MTI's (medical treatment incidents) across two very busy sites. I highly recommend this technology."

Scott Van Loon - National Manager For Oil & Gas Qube Energy – Australia

"ZoneSafe offered the practical solutions that our customers were looking for. It wasn't just a tick box exercise, the system actually deliverred."

Nick McCrea - Sales Manager Grays Forklift Services Ltd, UK

ZoneSafe systems are helping to keep work sites safe in over 25 countries worldwide within various industrial sectors including:

- Ports & Terminals
- Warehouse, Logistics & Distribution
- Paper Manufacturing & Packaging
- Construction & Civil Engineering
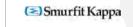- Waste & Recycling
- Aviation
- Mines & Quarries

The above logos represent some of the clients we've worked with.

For more information contact us now:
+44 (0)1202 868000
sales@zonesafe.com
www.zonesafe.com