

ELOshield

Proximity Detection System

THE INNOVATIVE “PROTECTIVE SHIELD” FOR INDUSTRIAL TRUCKS, AGVS AND COBOTS

- + Reliable detection of pedestrians working around industrial vehicles
- + Flexible, configurable protection zones
- + For any industrial truck type, brand or age
- + Pedestrian-to-truck and truck-to-truck warnings
- + OEM-independent, ideal for mixed fleets

**DRIVER
ASSISTANCE
SYSTEM**

Award-winning solution

ELOKON
www.elokon.com



Accident Prevention

For employees and vehicles

High-volume material handling requires fast, efficient logistical processes. In large warehouses where multiple lift trucks and staff work simultaneously, accidents still happen, despite precautions. High-risk zones include aisle intersections and congested areas with limited lines of sight, like docks, doorways, and building entrances.

Designed specifically to prevent lift truck accidents, ELOshield's effectiveness and reliability have been proven around the world. This active proximity detection system is ideal for reach and counterbalance trucks. ELOshield also works on AGVs (automated guided trucks), robots, cobots (collaborative robots) and other industrial trucks. By helping avoid accidents, ELOshield improves the reliability and efficiency of material handling operations, and reduces costs.

INTELLIGENT SAFETY TECHNOLOGY

For all hazardous areas in warehouses

ELOshield's intelligent technology monitors the environment in real time. As soon as a truck reaches a monitored area, ELOshield can detect potential collisions and react immediately. The assistance system triggers an acoustic, visual or vibration warning signal within milliseconds. Depending on the individual setting, ELOshield can also actively restrict the driving mode: vehicle speed can be reduced automatically to creep speed (2.5 km/h). When the truck leaves the "protection zone", speed restrictions can be lifted.

The ultra-wideband signal is accurate up to 10 cm and is transmitted through walls and shelves.



FLEXIBLE WARNING AND PROTECTION ZONES

Optimised safety for increased productivity

The standard ELOshield version includes preventative accident protection with two individually configurable detection areas: a warning zone and a protection zone. They can be set up as circular, symmetrical, or in custom user-defined fields.

The advantage: For example, by automatically restricting the protective field to their own lane, trucks can safely pass other vehicles or pedestrians when encountering traffic without triggering a false alarm. When setting up „customised zones“ it is possible, among other things, to define different zones on the load side and on the drive side of the truck.

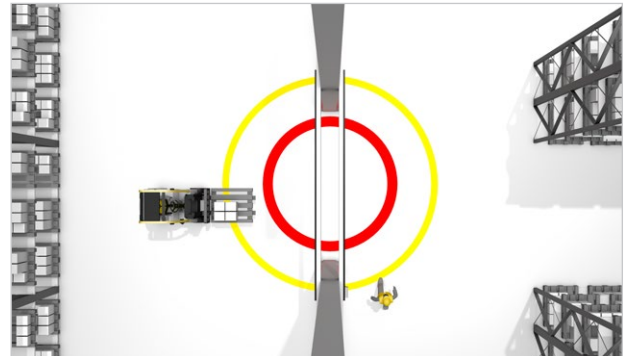
ONE SOLUTION – ENDLESS POSSIBILITIES

1 **ELOshieldGO**

Personnel detection – truck to pedestrians

The working areas of trucks and staff in the warehouse cannot be completely separated. ELOshield offers radio-based personnel protection in order for man and machine to be able to safely operate side by side.

The system helps prevent collisions by issuing a warning signal and slowing down the truck as soon as an employee is in the hazardous zone.



2 **ELOshieldDRIVE**

Collision warning – truck to truck

ELOshield provides reliable anti-collision protection between trucks. Vehicles are equipped with an additional detection module, individually programmed to ensure that the truck's detection range is tailored for its local operating zones.

If trucks are detected in the configurable zones, ELOshield automatically triggers a warning signal or optionally limits the vehicle speed.



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Different warning signals

for each hazardous zone with custom configurations

Individually adjustable pedestrian module

with different warning signals per module

Modular design

flexible combination of functionalities

Large areas

secured with minimal time required

360 degree protection: ELOshield.

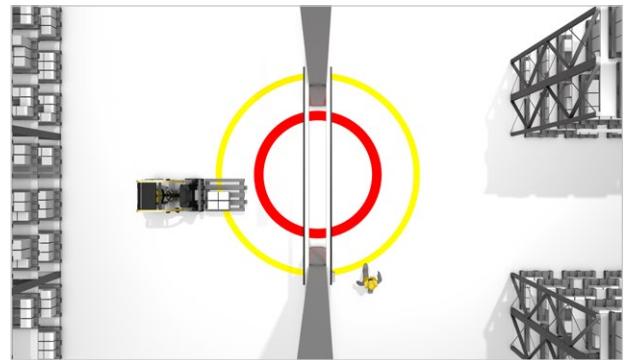
3 ELOshieldZONE

Monitoring aisle crossings and vulnerable areas

ELOshield regulates truck traffic like traffic lights. Fixed-position modules monitor hazardous areas such as aisle intersections and building entrances.

If a truck approaches, ELOshield can trigger a warning signal or – on request – driving speed can be automatically limited.

Thanks to individually adjustable ranges, it is possible for two trucks to enter an intersection at the same time or to restrict the entrance for certain gates.



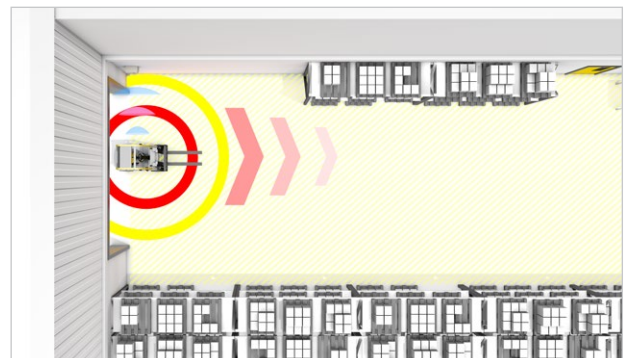
4 ELOshieldSPEED

Automatic speed adjustment in high-risk, large areas

Where the risk in warehouses or production is particularly high, for example because mobile robots, AVGs and humans work in close proximity, individual zones can be defined in this version of ELOshield.

Trucks entering the zone are automatically braked to the stipulated speed. Once the truck leaves the defined area, the original speed is automatically resumed.

Special zones, such as picking areas in warehouse or the entire warehouse, can be defined as hazardous areas. With this function, the areas are equipped with ELOshieldSPEED at all access points.



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