Smart Collision Prevention System

Enhance Safety | Prevent Accidents | Protect Lives

Welcome to a safer warehouse environment with our **Smart Collision Prevention System**! In busy warehouses, the risk of accidents between personnel and forklifts is a significant concern. Our innovative system is designed to address this challenge by providing real-time collision detection and prevention capabilities.
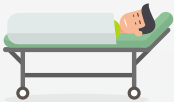
Key Statistics Regarding Forklift Related Accidents in the US

The total number of forklift-related injuries amounted to **24,960** in the years 2021-2022.

On average **34** people were injured in a forklift accident every day and **1** person is killed in a forklift accident every **5** days in the years 2021-2022.

In 2022, a total of **73** workers were killed due to forklift accidents.

During the period from October 2022 to September 2023, there were **2,546** safety violations related to powered industrial trucks, with an average penalty amount of **$3,513.20** per violation.

Sources: Occupational Safety and Health Administration (OSHA) / National Safety Council (NSC)

System Introduction

Our Smart Collision Prevention System utilizes state-of-the-art technology to monitor the movements of both warehouse personnel and forklifts. Using a combination of sensors and intelligent algorithms, the system continuously analyzes the proximity between individuals and equipment. When potential collision risks are detected, the system issues timely alerts to warn both personnel and forklift operators, allowing them to take immediate corrective action to avoid accidents.

Key Features

⏰ Real-Time Monitoring

Constantly monitors the distance and movements of personnel and forklifts within the warehouse.

Customized

🚫 Automatic Intervention

Capable of automatically triggering braking or steering adjustments to prevent collisions if necessary.

⚠️ Intelligent Alerts

Issues audible and visual alerts to notify individuals of potential collision risks.

⚙️ Customizable Settings

Offers flexibility to adjust alert thresholds and response actions based on specific warehouse needs.

Case Description

In a warehouse setting, a forklift operator was tasked with moving pallets of goods from high shelves to the ground level. Unfortunately, the operator failed to notice a worker performing cleaning duties near the aisle. Without realizing the worker's presence, the forklift operator continued the operation, leading to a collision with the worker. As a result, the worker fell and sustained injuries.

Causes

The primary cause of this accident was the forklift operator's failure to notice the worker and stop the operation in time to avoid the collision. Contributing factors may include non-compliance with safety procedures and operational rules by the operator, as well as inadequate training and awareness.

Consequences

The injured worker was promptly transported to the hospital for medical treatment. The diagnosis revealed head injuries and abrasions. The worker required a period of rehabilitation, potentially resulting in lost work time. Additionally, the accident had adverse effects on the warehouse's productivity and work environment.

📞 +886 3 6006899   ✉️ sales@browan.com   BROWAN

Featured Products

Wristband

- Auto-mode switches:
  - Driver mode with red LED indicator
  - Pedestrian mode with green LED indicator
- Connectivity: 6240-6739.2 MHz (channel 5)
- Size: 55 x 40 x 18 mm
- Weight: 54 g
- Battery: Rechargeable Lithium battery, 500 mAh
- Battery life: 24 hrs
- Rechargeable interface: micro-USB, 5V
- Ingress Protection: IP55
- Operating Temp.: -10~60°C
- Charging Temp.: 10~45°C

Vehicle Tag

- Connectivity: 6240-6739.2 MHz (channel 5)
- Size: 51 × 36 × 15 mm
- Weight: 29 g
- Battery: Rechargeable Lithium battery, 500 mAh
- Battery life: 24 hrs
- Rechargeable interface: micro-USB, 5V
- Ingress Protection: IP55
- Operating Temp.: -10~60°C
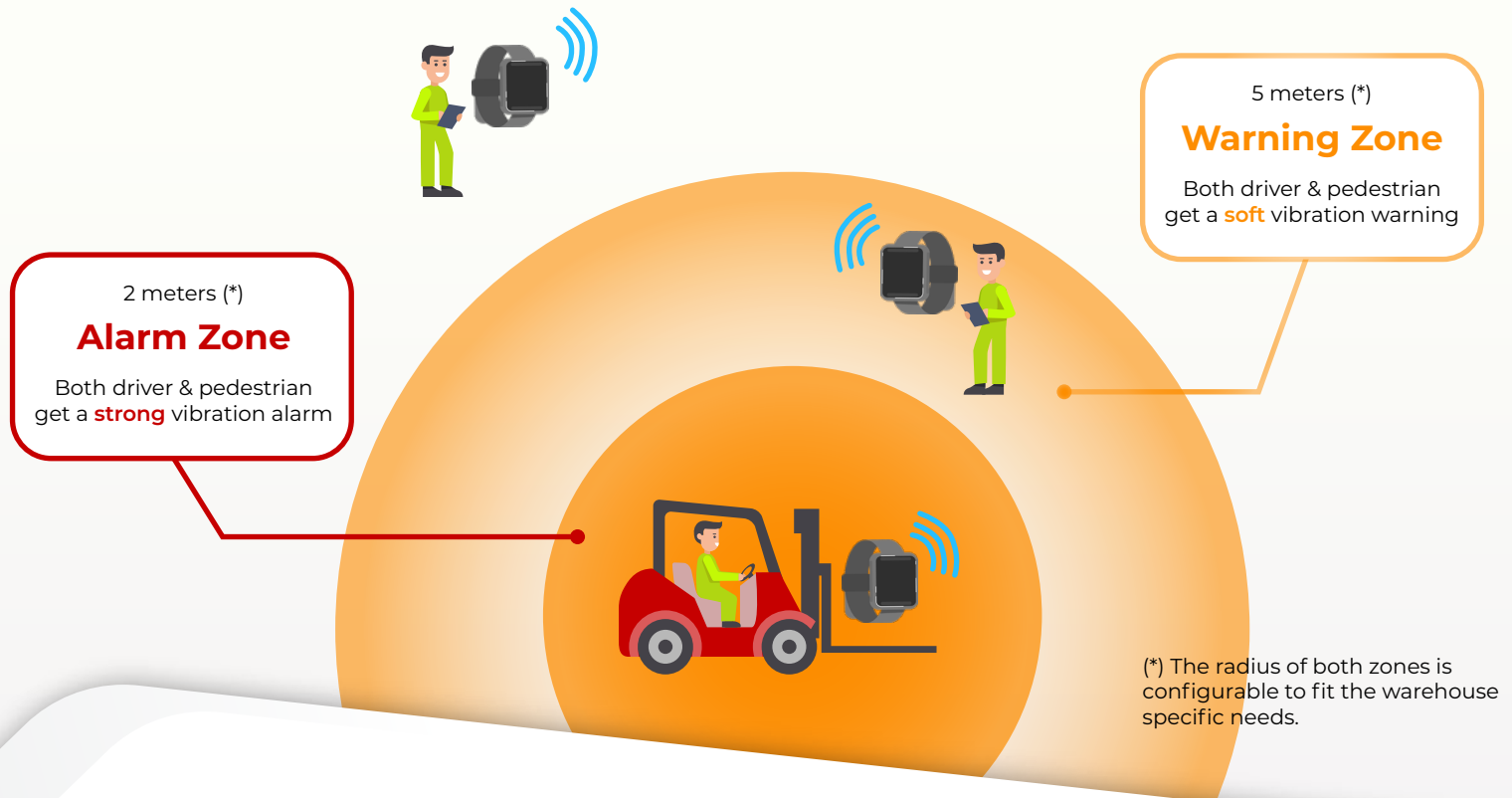- Charging Temp.: 10~45°C
- No mounting required. Touch fasteners to stick on the vehicle.

How does Smart Collision Prevention System work?

- Safety is improved by warning forklift drivers of the immediate proximity of pedestrians
- A record of proximity events helps warehouse managers secure staff and limit disruption
- An incident database is created for auditing and liability purposes, and all incident data is logged into a dashboard for easy access

5 meters (*)
Warning Zone
Both driver & pedestrian get a **soft** vibration warning

2 meters (*)
Alarm Zone
Both driver & pedestrian get a **strong** vibration alarm

(*) The radius of both zones is configurable to fit the warehouse specific needs.

Benefits for Customers

Enhanced Safety
Minimizes the risk of accidents and injuries in the warehouse environment, promoting a safer workplace for all.

Improved Efficiency
Reduces disruptions to operations caused by collision incidents, leading to increased productivity.

Cost Savings
Helps lower maintenance costs associated with equipment damage and reduces expenses related to workplace injuries.