



AUTOMATED SAFETY SYSTEM FOR PREVENTING FORKLIFT ACCIDENTS

The becom automated safety system effectively prevents forklift accidents by creating safety zones in which crucial vehicle parameters are automatically adjusted to meet safety requirements.

Did you know?

- About 10% of all forklifts are involved in some kind of accident every year
- About 100 people get killed each year in forklift accidents
- Fatalities occur mainly in manufacturing (42.5%) and construction (23.8%)
- 42% of forklift fatalities are the result of the operator trying to jump off from a tipping vehicle
- Possibility of forklift accidents can be reduced by enforcing limits to crucial parameters, such as driving speed and lifting height, in typical danger zones like crossroads, gates, blind corners, etc.

With the **becom safety system**, preventing forklift accidents is easy. A safety zone is created simply by placing two transmitters on each entry and exit to the safety zone. Each vehicle is equipped with a receiver unit.

Upon entering a safety zone, the receiver unit registers the signal from the transmitter and gives out signals to the vehicle to **adjust pre-set parameters and limits automatically**. Typical examples of parameter changes and limits are the driving speed limit within the safety zone, making a full stop for a defined period of time on the entry to the zone, limiting lifting height in the zone, blowing a horn on approach to dangerous corners.

Multiple parameters can be changed simultaneously, like decreasing driving speed and blowing a horn while approaching a crossroad, or decreasing the driving speed, blowing a horn and limiting the lifting height while approaching gates, etc.

DURABILITY

- The system is a heavy duty industrial system suitable for indoor and outdoor use.

SCALABILITY

- The system supports unlimited safety zones and unlimited vehicles per installation.

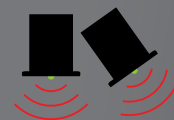
VARIABILITY

- Although the system was originally created for forklifts, it can be easily adapted for the use on nearly any type of vehicle.

FLEXIBILITY

- For each safety zone, up to four vehicle parameter changes and/or limits in any combination can be defined via the user friendly central control application. The changes to the settings are active immediately.

Example Application



Outside safety zone:
No speed limit



Inside safety zone
Speed limit on



Outside safety zone:
No speed limit

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Mode of operation

- Upon entering a safety zone, the receiver in the vehicle receives the signal from the transmitter and sends out pre-defined signals to the vehicle.
- Upon exiting a safety zone, the receiver registers the signal from the transmitter on the zone exit and returns to a defined neutral state.

User friendly

- Both receiver and transmitter have their own settings memory
- The initial setup and setup changes are facilitated through the user friendly control application
- Receiver settings can be adjusted any time
- Transmitter settings can be adjusted within 30 seconds after the power-on of the main transmitter and within 30 seconds after the last active communication between the control application and the main transmitter

Transmitter

- Operating mode: infrared
- Range: 12 m
- Dimensions: 26 x 56 x 86 mm
- Weight: 200 g
- Power source: 230V/50hz



Fully automated system

- The system is fully automated and does not require any physical connection between the vehicle and the system.

Versatility

- The system can be adjusted to control any vehicle parameters that can be switched on or of trough electric signals or circuits.
- Standard parameters include:
 - *maximum speed limitation*
 - *headlights*
 - *horn*
 - *lifting height limitation*
- The parameters can be set in any combination. Each security zone has its own parameter settings. Each parameter can be programmed to either switch on/off or to get active for a defined period of time.

Receiver

- Operating mode: infrared
- Outputs: 4 x 24 / 48 V in any combination of ON/OFF state
- Dimensions: 80 x 89 x 1850 mm
- Weight: 500 g
- Power source: 24 / 48 V, 30mA
- Settings validity: from 10 sec to 2250 sec or until receives new command from transmitter



REFERENCES

Honeywell

Prešov, Slovakia