

Cat[®] Seat Belt Reminder System

Enhance Jobsite Safety, Track Operator Behavior,
Helps Ensure Regulatory Compliance



2024 IPLOCA Health & Safety Award Entry

About Caterpillar:

Since 1925, Caterpillar Inc. has been helping our customers build a better world – making sustainable progress possible and driving positive change globally

Findings and Challenges

BURNING PLATFORM



APPROXIMATELY 150,000 INJURIES EACH YEAR ARE THE RESULT OF CONSTRUCTION SITE ACCIDENTS.

Bureau of Labor Statistics (BLS)



BURNING PLATFORM

OSHA ROLLOVER STUDY

In a recent OSHA study focused on machine rollovers, to prevent fatalities during a rollover incident, not only must the machine be equipped with Roll-Over Protection System (ROPS), but the operator must also be wearing the seat belt.



BURNING PLATFORM



1 IN 5 WORK-RELATED DEATHS OCCUR IN CONSTRUCTION

Occupational Safety and Health Administration (OSHA)
Safety Data 2017



- Human error always remains a real possibility.
- Sometimes busy operators simply forget to buckle up - especially if their attention is focused elsewhere
- Seat belt usage is mandatory on many job sites.

- Failure to wear a seat belt not only presents a safety risk, it also may violate local regulations.
- So, even a single infraction could shut down productivity and possibly cause your company to incur penalties.

Solution: Introducing Cat[®] Seat Belt Reminder System

- Cat[®] Seat Belt Reminder gets operators' and site personnel's attention through audible and visual warnings when seat belt is not latched.
- The system helps drive operator accountability and a safe site
- System installation is simple and is available as retrofit for Cat and other brand equipment, making it ideal for an entire fleet

Real-Time Safety Monitoring

With equipment telematics, Cat VisionLink keeps track of how often the Cat Seat Belt Reminder is activated.



- Anytime an operator starts a machine or disengages the parking brake without first buckling up, Cat VisionLink records the event.
- That data is sent in real time to the Cat App and VisionLink, the Cat online user interface.
- Site managers can keep track of how often seat belt violations occur, identify opportunities for operator training.

Operators' Reminder

When the operator is seated and the parking brake is turned off, the Cat Seat Belt Reminder System triggers the following prompts:

- Sounds an audible warning
- Activates a visual warning



Site Personnel / Supervisor Visual

The on-cab beacon activates whenever an operator is unbuckled during machine operation - giving site supervisors the ability to see which of their operators is not properly secured.



Implementation and Benefits

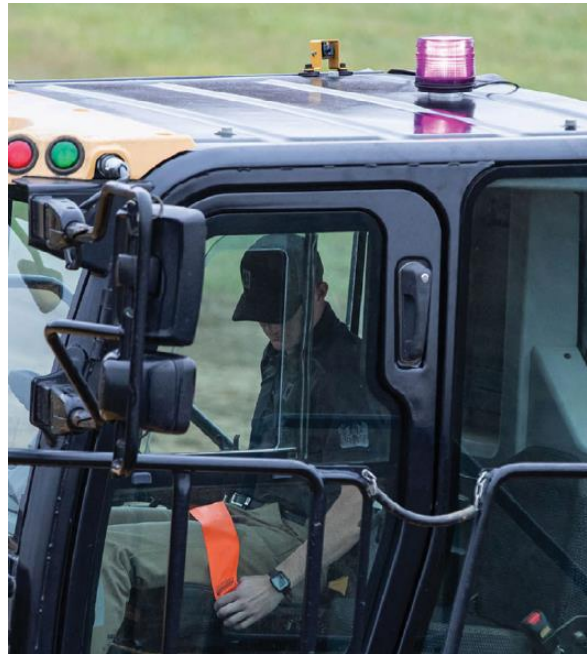
Enhance Jobsite Safety

Available for both the operator and trainer seat belts, the Cat Seat Belt Reminder is an affordable way to give operators a physical reminder to buckle up and the site manager assurance that equipment operators are following procedures to protect themselves.

The system automatically alerts operators, site personnel, and the back office so behaviours can quickly be modified.

Track Operator Behavior

Incidents can be captured through Cat VisionLink to keep site managers aware of operator compliance and frequency of reminder alerts.



Helps Ensure Regulatory Compliance

Failure to wear a seat belt not only presents a safety risk, it may also violate regulations. Even a single infraction can shut down production and possibly



Implementation

The universal seat belt kit can be installed in 12V or 24V systems and takes less than 2 hours when using existing seat belt mount locations on all brands of equipment – ideal for mixed fleet use.



Customer Results

One major pipeline construction contractor in the US has installed new and retrofitted the full seatbelt alarm / beacon Cat Seat Belt Reminder System in more than 1,600 machines.

The company saw the seatbelt usage improved from below 70% in the beginning of the first year to above 85% after the first year

Another steel / scrap-handling customer has also started on the similar program to fit all its 1,000 machines fleet with the Cat Seat Belt Reminder System