

# PEOPLE DETECTION FOR EXCAVATORS

CAT® DETECT



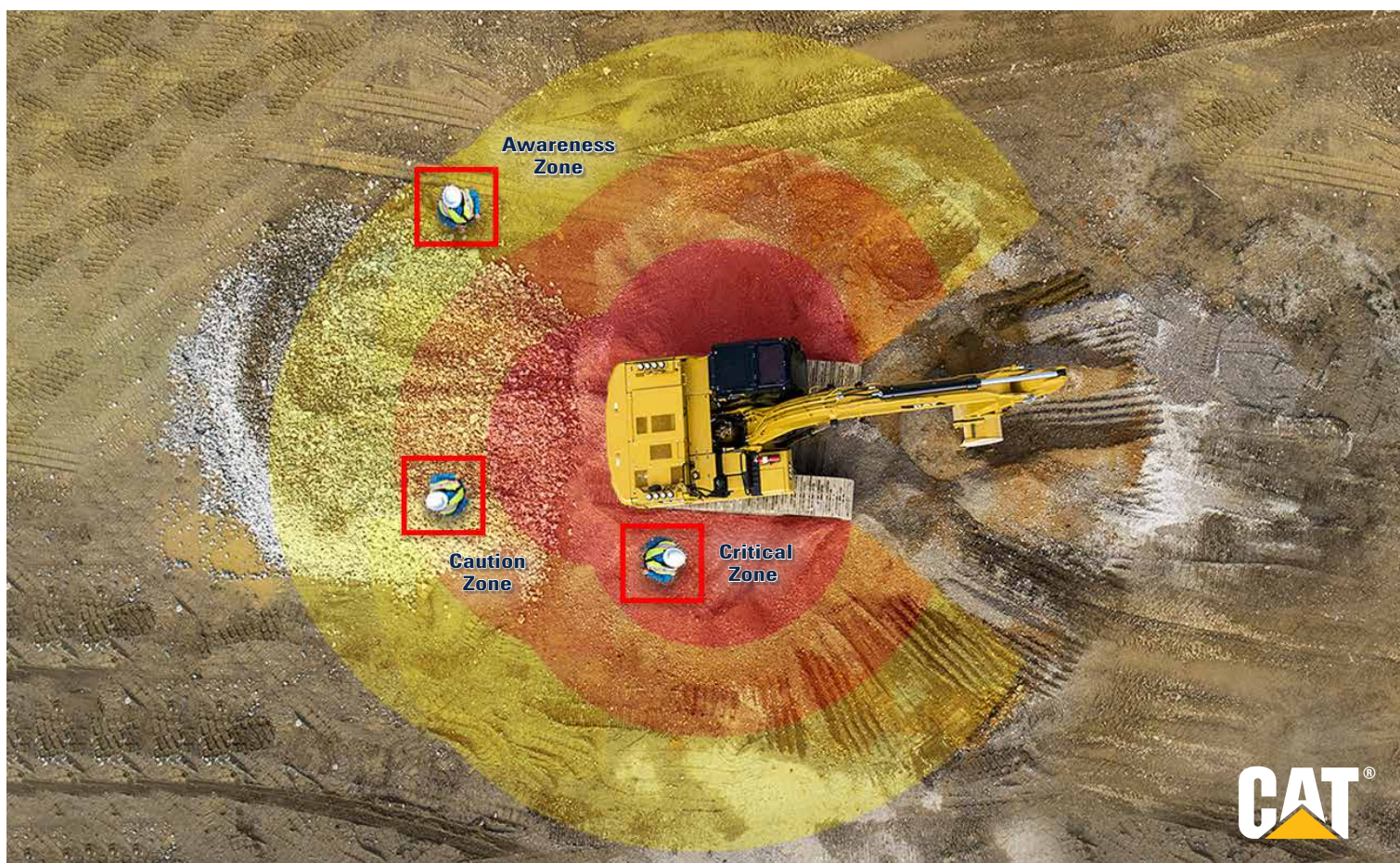
## IMPROVE SAFETY AROUND OPERATING EQUIPMENT

People working near heavy equipment on a jobsite have a risk of being struck by a machine. While machines are designed to maximize operator visibility, it can be challenging to constantly monitor what is going on around them. Cat® Detect - People Detection for excavators is an intelligent vision camera system that can alert an operator when someone enters within a machine's hazard zone.<sup>1</sup>

- Helps to reduce the risk of injury for people working around machinery.
- Differentiate people from background objects - detects multiple moving and stationary workers.
- Provides visual and audible alerts to the operator using the in-cab display.
- Utilizes the machine's existing in-cab display and harness with a dealer-installed three-camera kit.
- Designed to function without the need for additional technologies.
- Compliments other safety systems and enhances operator safety awareness.

### > HOW IT WORKS

- Continuously monitors for personnel within three detection zones around the excavator - awareness, caution, and critical.
- Utilizes three cameras with up to 270-degree coverage - 9 m (29.5 ft) maximum detection distance.<sup>2</sup>
- Highlights people with red detection boxes on the in-cab display to help increase operator awareness.
- Triggers progressive visual and audible alerts based on a person's proximity to the machine - three detection zones.
- Detects multiple moving and stationary personnel simultaneously during machine travel and operation.
- Provides both in-camera and off-camera monitoring.
- Not compatible with Cat Command remote control technologies.





# SUPPLEMENT OPERATOR VISIBILITY

## ENHANCE SITUATIONAL AWARENESS

### > IN-CAMERA MONITORING

When personnel are detected near a hazard zone, and within direct camera view, a visual alert is shown on the in-cab display<sup>1</sup>, and an optional audible alarm is played.

- **Visual Alert Icons** - Directional icon alerts indicate both location and distance level when personnel are detected. Three color levels provide approximate proximity to the machine - red (critical), amber (caution), and yellow (awareness).
- **Audible Alert Icons** - Communicate if the People Detection system is active (standby/on/off), if an audible alarm is active (on/off), or if there is a system error causing People Detection not to function properly.
- **People Detection Indicator** - A red boundary box surrounds personnel that have been detected within a hazard zone to help increase operator awareness.



In Camera View

#### ALERT ICONS



Yellow Zone - Awareness

Amber Zone - Caution

Red Zone - Critical

#### RED BOUNDARY BOX

Indicates a Person Has Been Detected

### > OFF-CAMERA MONITORING

When personnel are detected near a hazard zone but are not within direct camera view, a visual alert is shown on the in-cab display<sup>1</sup>, and an optional audible alarm is played.

- **Audible Alert Icons** - Identical to in-camera monitoring.
- **Visual Alert Icons** - Identical to in-camera monitoring.
- **Side Bar Indicators** - Off-camera directional icon alerts indicate both location and distance level when personnel are detected. Three color levels provide approximate proximity to the machine - red (critical), amber (caution), and yellow (awareness).
- **People Detection Indicator** - The red boundary box for personnel detection is not available in off-camera or 360-degree views.

#### SIDE BAR INDICATORS



Off-Camera View



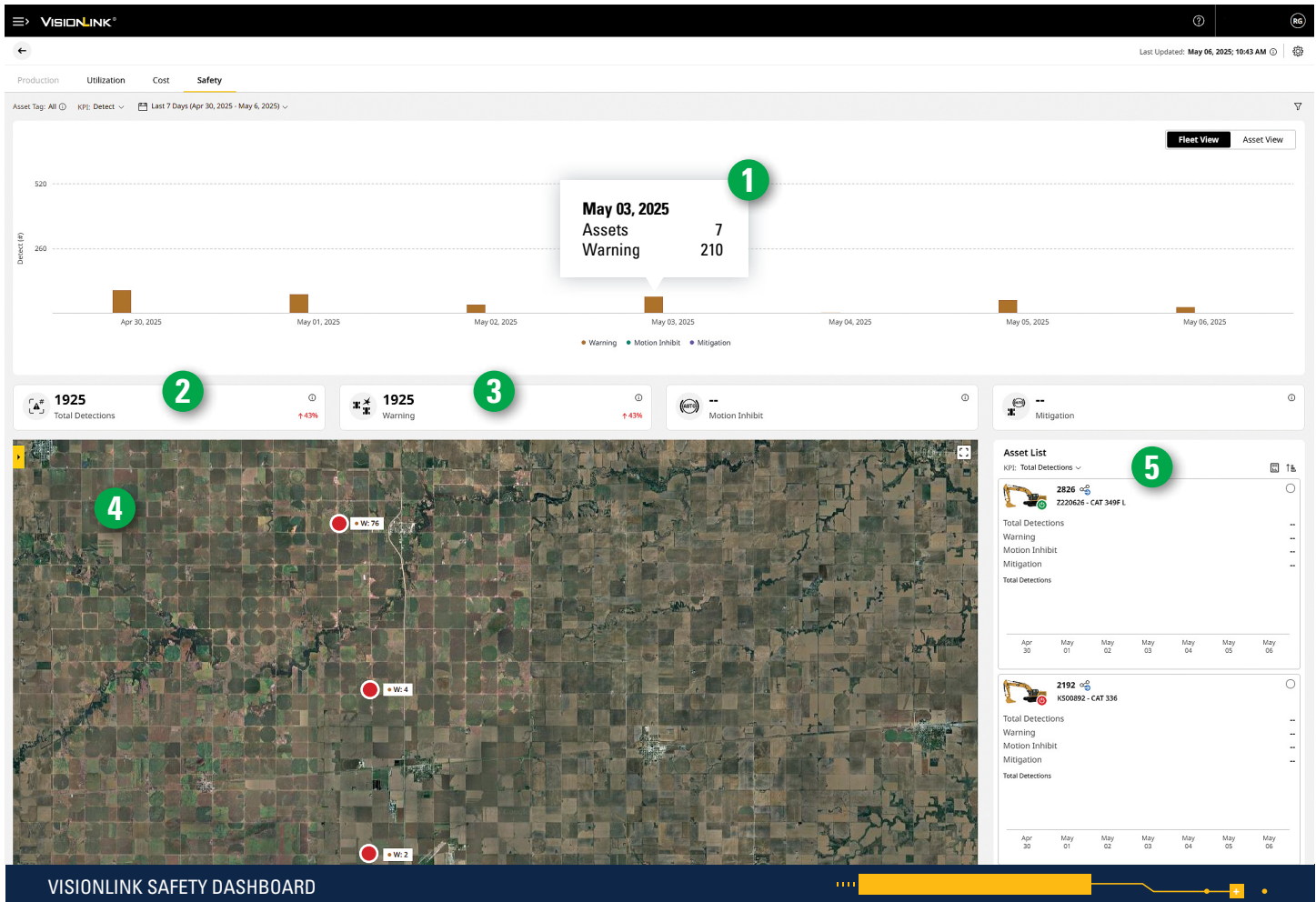
360-Degree View

<sup>1</sup> The system may not detect personnel in certain circumstances, such as fast swings speeds, people lying down or crouching, or when cameras are impaired by low light conditions (dusk, dawn, overcast), inclement weather (snow, rain, fog), or other similar conditions. See operation and maintenance manual regarding limitations of use.

<sup>2</sup> Detection distance is the approximate range from each camera.

# VISIONLINK™ INTEGRATION

## REAL TIME SAFETY MONITORING



## REAL TIME SAFETY MONITORING\*

When someone is detected within a critical red zone, an operator alert is triggered, and the event data is transmitted in real-time to VisionLink™. This allows you to monitor detection frequency and identify opportunities to enhance safety training on the jobsite. By staying informed, you can create a safer working environment and optimize your operations.

## KEY SAFETY INDICATORS

Using the VisionLink Safety Dashboard, you can easily assess your operators' safety performance at a glance. Analyze safety KPIs on your site cards to identify trends and determine where you can take action to promote safe and productive work.

1. You can view a graphical representation of total detect warnings over a specified date range (up to 7 days). By clicking on a specific date, you can see a detailed list of detections.
2. Total Detections - This represents the sum of all warning, motion inhibit, and mitigation counts for all assets within the selected date range.
3. Warning - Denotes the total number of critical (red zone) warnings for all equipment during the selected date range.
4. Asset Map - This feature displays the location of each asset's detection warning.
5. Asset List - This provides a detailed view of safety data for each machine within the selected date range.

*\*VisionLink subscription and compatible Product Link hardware required. Availability may vary by region, consult your Cat Dealer for more details.*

# HOW TO UPGRADE

## ENHANCE JOBSITE SAFETY

Contact your Cat dealer for more information and how to order Cat Detect - People Detection for Excavators.

- Model and technology availability may vary by region.
- Cat Detect - People Detection compliments but does not replace the basic safety precautions and procedures for machine operation.
- Always follow recommended safety procedures when operating or working around equipment.



[WWW.CAT.COM](http://WWW.CAT.COM)



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