



YOU'RE ON A JOURNEY TO ZERO. WE'RE HERE TO HELP.

How much safer would your operation be if you could eliminate blind spots? Identify fatigued operators? Alert operators to potential collisions? Locate workers on your site? With Cat® MineStar™, you can.

The Cat MineStar Safety portfolio offers a number of packages that address mine-site safety challenges. They help sites see, mitigate and manage operator fatigue and distraction. They help keep operators informed about nearby people, objects and machines, and can also be configured to provide valuable information about site conditions and other equipment or assets working in the area.



Operator Alertness

Fatigued and distracted machine operators can be found on mine sites every day — and the consequences can be costly, even fatal. MineStar can help you identify fatigue and distraction — and address it — in real time.

In-Cab Technology

Key to the solution is the Cat Driver Safety System — an OEM-agnostic, non-intrusive, in-cab detection technology that instantly alerts operators the moment fatigue or distraction is identified. It works by monitoring eye-closure duration and head pose. If the system detects a fatigue or distraction event, the operator is immediately alerted through an in-vehicle seat vibration and audio alarm.

Remote Monitoring Center

Data from the in-cab system is fed to the Monitoring Center, where safety advisors work around the clock to analyze data and video to notify onsite personnel about drowsy vehicle operators. The monitoring center delivers standard reports and fatigue consultation to develop Fatigue Intervention Plans with site management.

We combine industry-leading technology with our expertise to:

- Assess your operation and identify the scope of the issue
- Instantly alert operators the moment fatigue or distraction is identified
- Gather and analyze data to notify onsite personnel about drowsy operators

- Reduce risky operator behaviors
- Assist with change management training and shiftwork consulting
- Offer resources such as training, operator coaching and educational support

Collision Awareness

Collision Awareness for underground helps make operators more aware of their surroundings by tracking the position of machines and people. It utilizes a proprietary Time of Flight technology to enable high-precision positioning of assets without on-site network via machine-to-machine communication. The system delivers excellent signal propagation for longer range and visibility with sub-meter accuracy.

Underground Equipment & Personnel Tracking

Using high-precision underground positioning technology, MineStar can accurately track personnel and assets to sub-meter accuracy, in real time. Enabled by our tracking infrastructure, Equipment Tracking provides site controllers with a view of the location of all miners and equipment via the mine network.

- Real-time tracking of equipment progress in alignment with the shift plan
- Continuous visibility for operators of their surroundings
- Location and status of all personnel and assets
- View scheduled and unscheduled downtime and operational stoppage



For more information, go to cat.com/minestar or contact your local dealer.