

Driven to distraction: Answering the need for fatigue alerts

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ABSTRACT

Mines are busy places where noise, heavy traffic and poor visibility can often be the norm. Distraction and fatigue can also be an all-too-real hazard for light vehicle operators used to sharing the road with giant trucks driving familiar routes during long shifts. According to NIOSH (the U.S. federal agency, National Institute for Occupational Safety and Health) employee fatigue contributes to at least 20% of all workplace incidents and costs employers at least \$135 billion per year. Combined with distraction, fatigue is said to be behind 65 per cent of accidents in open pit mines.

Hexagon AB, a global leader in sensor, software and autonomous solutions, is well aware of the risks its mining customers face. Operators are often unaware of critical situations, so help detecting fatigue levels is essential to mitigate the associated risks. To tackle this safety issue, Hexagon's Mining division now offers a real-time monitoring solution specifically tailored to light-vehicle operators. Using computer vision AI, it provides real-time monitoring of operator alertness inside the cab of all auxiliary and medium-sized mobile equipment, as well as in light vehicles, buses and semi-trucks. It integrates with Hexagon's operator alertness solution for heavy vehicles and an analytics server, enabling full heavy- and light-vehicle fleet monitoring.

The solution is part of Hexagon's MineProtect portfolio, which comprises systems for collision avoidance, fatigue monitoring, personal protection, tracking radar and vehicle intervention. Presenting will be Sean Perry, Global Director for MineProtect, Hexagon's Mining division.