

WHO WE ARE WHAT WE DO HOW WE WORK



Life by SmartCap delivers successful fatigue risk management system globally.

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Mining safety leaders across the globe trust Life by SmartCap to empower operators to become proactive in their fatigue management process with real data, actual insights, and individual reporting to support wellness initiatives.

BASE METAL MINING OPERATIONS WITH GLOBAL INTERESTS

Overview

With a core value statement of, "We think safety first", this global base metal mining company invests in employee welfare. Originally trialling in a head to head against a camera-based solution, SmartCap's superior predictive technology and real time fatigue alerts made it the obvious choice for an operation where worker wellbeing is paramount.

The leading indicator nature of our alerts and alarms and the additional proven accuracy of SmartCap's measurements was the reason SmartCap was selected. The product suite has so far been deployed at the company's South American copper mining operation and in Australia at its zinc mine, where, as a fly in, fly out operation, SmartCap is viewed as an essential component of its fatigue risk management system.

Original Install Date

SmartCap was deployed in October 2017.

Number of Trucks and Drivers

The number of vehicles and drivers that benefited from each stage of the deployment are as follows: 1700 drivers and 700 vehicles including mining haul trucks, buses, on-road logistics trucks, and light vehicles.

Deployment Statistics

Over the past year, drivers have been protected from microsleeps by the SmartCaps technology for 389,588 hours and 3,300,000kms of driving (S.America), and 2,649 hours and 66,000 kms (Australia).

Outcomes

Statistics following this deployment show:

- In the two years since deployment, all SmartCap users on both sites have enjoyed a zero fatigue incident record.
- The Australian site has adopted an 'every journey, every time' policy with regards to employees use of SmartCap.
- As a sophisticated and established SmartCap site, the management engage closely with the SmartCap operations team to test new releases and provide vital feedback helping us to constantly refine our cutting edge technology.



LARGE COPPER MINING IN EAST ASIA

Overview

SmartCap's installation at this open-cut copper mining operation in East Asia followed multiple successful deployments

Deployment Statistics: Over the past year, SmartCap's usage on this operation has totalled 316,000 hours and 11,430,000km of driving. Broken down over the three different areas of the deployment, this equates to:

in Australian coal operations across the business's global portfolio. Fatigue had been identified as a potential hazard, with the mine's haulage fleet recognised as the highest-risk asset class. Following the initial deployment to 38 mining trucks, SmartCap has since been additionally deployed to:

- the bus fleet responsible for transporting personnel to and from the local airport and around the mining lease
- the over-the-road truck fleets responsible for moving copper concentrate from the site to its final destination.

Original Install Date: SmartCap was deployed in September 2015, with full rollout to the mining operation completed in January 2016.

Number of Trucks and Drivers: The number of vehicles and drivers that benefited from each stage of the deployment are as follows:

- Open-cut operation: 45 mining vehicles and 386 operators
- Bus fleet: 15 buses, 2 light vehicles and 45 drivers
- Concentrate truck fleets: 173 trucks and 250 drivers

Their solution was to partner with Ramjack to get sustainable value from their real-time data.

- Open-cut operation: 240,000 hours (at 30km/h) and 7.2 million km
- Bus fleet: 11,000 hours (at 30km/h) and 330,000km
- Logistics: 65,000 hours (at 60km/h) and 3.9 million km

Outcomes

Statistics following this deployment show:

- There have been zero fatigue incidents for SmartCap operators across 3.5 years and 1.1 million hours of operation.
- There has been a 68% reduction in the fatigue alarm rate.
- Early warning alerts have resulted in 97.7% effective operator self-management actions.
- The SmartCap data has generated the business insight that there is an 80% increase in the fatigue risk alarm rate during the sub-zero winters compared to summer periods.



ASSMANG BEESHOEK

Overview

Beeshoek deployed SmartCap in 2014 to assist in gauging the fatigue risk on-site and empowering the workforce to proactively self-manage. Leading up to the deployment, the site had suffered from a number of incidents involving operators returning to work after extended periods of leave.

Outcomes

Beeshoek have seen a significant reduction in fatigue incidents on-site. Workforce engagement has greatly improved as a result of the inclusive change management process.

Challenges

- Limited literacy amongst the workforce has required a heavy emphasis on training via demonstration.
- High staff turnover makes long-term improvements difficult to gauge.

HUNTER VALLEY OPERATIONS

Overview

HVO deployed SmartCap in 2012 to add to its existing FRMS framework. As a mandatory tool for operators of the haulage fleet, SmartCap provides real-time fatigue alarms to a central control room, which triggers safety interventions.

Outcomes

HVO have seen a near-total elimination of fatigue incidents from their business since introducing SmartCap.

Challenges

Strong union presence necessitates comprehensive and ongoing consultation.





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