SAFETY takes centre stage

Global safety-focused and technology solutions specialist **Hexagon Mining** is dedicating the 2017 year and beyond to addressing the biggest challenges facing mines – cutting costs and reducing or eliminating accidents.

In light of this, the company will introduce improvements across its portfolio in the upcoming year; from geology-mine planning to fleet optimisation through to collision avoidance and fatigue monitoring.

It will also be extending its global reach with a new channel sales division, which will target remote and under-served markets via a new partnerships programme.

"In 2017 we will enhance our collision avoidance system (CAS) by introducing our vehicle intervention system (VIS)," says Hexagon Mining president, Hélio Samora. CAS is already installed in more than 25 000 vehicles in over 55 mines and VIS is an additional layer of safety above CAS which takes control of a machine if the operator does not react appropriately to a CAS warning. "This will be of particular interest to our South African customers where government regulations will compel surface mines to implement such systems on heavy machine equipment by June 2019."

The improved FatigueMonitor will further enhance Hexagon Mining's safety suite. It also integrates with CAS and uses proven computer vision technology to monitor operators unobtrusively. "We are consolidating these safety solutions with our fleet management technology in a single, elegant display. This simplifies installation and simplifies life for the operator; who is not bothered by numerous units, cables, and multiple simultaneous alarms, which can be prioritised in function of the threat," Samora outlines.

From a mine planning perspective, Hexagon Mining will introduce GeoLogic, which sequences surfaces and solids to create an air-tight geological model. "We expect GeoLogic to save geologists hours, if not days, of work by creating an entirely reproducible, auditable geological model, which can be quickly updated with new information."

Hexagon Mining President, Hélio Samora, has committed the company to a life-of-mine vision that prioritises the two biggest challenges facing mines – cutting costs and reducing or eliminating accidents

Live Terrain is another "exciting solution" coming later in 2017. Integrated with systems for mine planning, operations, and safety, Live Terrain will be a web-accessible terrain management system that allows users to upload, time-search, inspect, share, and download 3D mine surfaces.

The importance of surface vehicle safety

In South Africa, the mining industry is paying increasing attention to developing systems that can protect drivers and operators from collisions in busy surface mines, particularly where large haul trucks are interacting with smaller personnel vehicles. South Africa's Department of Mineral Resources has introduced regulations compelling surface mines to enhance safety for all trackless mobile machinery, such as trucks.

"We believe that CAS, FatigueMonitor, and VIS represent a formidable integrated solution for mines looking to comply with these regulations and protect both people and equipment."

Hexagon Mining's mine planning software suite, MineSight, is well-established in Africa and has made a significant difference for mining operations such as Freeport-McMoRan's Tenke Fungurume mine, where MineSight Dynamic Unfolding is helping to tackle complex geology challenges.

Amenable to all miners

The company is also making its technology more affordable with industrial minerals licences. Industrial minerals typically represent smaller mining operations for non-metallic deposits such as granite, marble, and limestone. "New exploration licences and standalone solutions will make it easier for smaller operations to access our integrated solutions," Samora concludes. **MRA**

In 2017, Hexagon Mining launches its Vehicle Intervention System, which takes control of a machine if the operator does not react appropriately to a Collision Avoidance System warning