Planning for productivity

Faced with scarcer high-grade ores, volatile commodity prices and tighter profit margins, mines are increasingly looking to integrate solutions. By Lisa Shearon

y integrating mine planning with operations and safety, Hexagon Mining aims to solve surface and underground challenges.

The company has united MineSight, Leica Geosystems Mining, Devex Mining and SAFEmine to deliver what it says is a life-ofmine solution.

While Hexagon Mining is relatively new, its brands are well established.

Founded in 1970, MineSight is a comprehensive mine modelling and mine planning software platform.

MineSight's solutions for exploration, modelling, design, scheduling and operation are part of Hexagon Mining's vision of smart change. The software is at the core of several products to be released this year, including HxM Athena and HxM Blast.

HxM Athena is an all-in-one mining business intelligence and analytics platform. Using a robust extract, transform and load process to collate mining data, HxM Athena imports, validates, analyses and stores data from multiple input sources to a single data repository. It then presents the data in userfriendly dashboard views.

The sources of data can be extremely varied, from fleet management systems and drill rigs to on-board fragment analysis cameras and general mine-planning systems.

Dashboards for safety and slope stability will be added in later versions.

"It's critical for managers to understand

what is going on in their operation across multiple areas of the mining value chain," MineSight senior product manager - geology and operations Mark Gabbitus said.

"Being able to track poor shovel performance back to a sub-optimal blasting process, for example, can give managers the confidence to change projects, improve practices and track the results.

here is the productivity rate of excavators, which is related to the rock hardness and the blast's effectiveness. If productivity is falling behind plan, the Atlas schedule will be updated on the fly, allowing engineers to predict problems before they happen and hopefully solve them.

The drill-and-blast cycle is integral to Hexagon Mining's vision. It believes HxM

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"This can be priceless information but it is easy to attach a value to this as well.

"Some companies tempted by technology such as laser scanners or HPGPS tracking are embracing data capture without the means to actually make good use of the data.

"HxM Athena is different because it offers both business intelligence and business analytics, enabling you to understand why, as well as what."

MineSight's short-term scheduling product, Atlas, will soon be able to import actual FMS information automatically.

According to Hexagon Mining, the value

Blast will bring precision and dependability to one of mining's most challenging steps.

HxM Blast will design and manage drilland-blast patterns interactively on screen while storing all of the design - and actual information in a Structured Query Language database.

Drawing upon visualisation and automation software, together with MineSight's Axis product, Hexagon Mining will focus on tracking grade and rock fragmentation.

• See the Mine Planning & Exploration Software feature on page 60.

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