HXGN MINEMEASURE ENSURES AN EFFECTIVE AND MANAGED BLAST EXECUTION.

HEXAGON'S HOLISTIC APPROACH TO DRILL AND BLAST

HEXAGON'S HXGN MINEMEASURE COMBINES BLAST DESIGN SOFTWARE, HIGH-PRECISION DRILLING, BLAST-MOVEMENT MONITORING, FRAGMENTATION ANALYSIS AND ENTERPRISE ANALYTICS TO MAXIMISE ORE RECOVERY AT MINING OPERATIONS.

Hexagon has unveiled the HxGN MineMeasure solution, which aims to improve the drill and blast process by delivering accuracy and precision to every step from blast planning through to the extraction of mineral resources.

MineMeasure leverages blast design features from Hexagon's comprehensive mine planning software, incorporating geology properties from the block model, the simplified representation of an orebody.

Machine-guided drills then execute the blast plan while integrated blast-movement sensors and software technology accurately track the blast to minimise loss and dilution.

Hexagon drill and blast vice president James Dampney says the software complements the company's existing solutions.

"We have a range of solutions across drill and blast and MineMeasure unites them in a single, connected ecosystem," he says.

"Some of the key benefits of MineMeasure include being able to seamlessly manage the entire drill and blast workflow to optimise blast outcomes with greater precision. For example, blasting to achieve the right fragmentation ensures processing plants are not blocked by huge boulders, impacting costs and throughput."

MineMeasure uses advanced image-analysis techniques to ensure fragmentation is managed and optimised.

Hexagon has produced something that delivers scrutiny and transparency in every step of the ore extraction journey.

MineMeasure maximises safety, incorporating a vibration monitoring system and slope stability analysis.

"The drill and blast team are really one of the key caretakers for the mine's licence to operate so safety is critical," Dampney says

"Our technology ensures an effective and managed blast execution, including monitoring of blast vibrations. Safe blasting also means keeping your licenced operators away from risk."

Dampney says MineMeasure is designed to work for open cut metals and coal mining operations.

Every step of the ore extraction journey from planning through to mill/plant delivery can be scrutinised to analyse and track with transparency.

"There is a different benefit depending on the commodity of course," Dampney says.

"There aren't the same processing requirements with coal as with minerals, but having the right blast QA/QC solutions means reducing the risk of diluting coal through poor blasting.

"For metal fragmentation becomes even more important, particularly for processing plant throughput."

Allowing teams greater insight into their drill and blast processes ensures operations can create their own opportunities to improve ore recovery and strategise future projects.

Dampney says the new technology has received positive feedback from those working in the mining and resources industry.

MineMeasure was launched at this year's MINExpo in Las Vegas, which exhibits the latest mining and minerals processing technologies, as well as machinery and equipment for the coal, metal and non-metal mining processing industries.

"When I speak to drill and blast engineers, superintendents and mine managers, they are very keen on a seamless, simple workflow with the data all collected in one place that is going to allow them to speed up their ore recovery, without risking objectives or safety," Dampney says.

"They are looking to have their data work in a far more intelligent and efficient way; our customers want this kind of capability. At Hexagon, we call this the Power of One – that's one partner and one platform pulling together all workflows across the mine to drive greater productivity.

"Because we are a software and sensors company – we are not an explosives company or an OEM – our customers have confidence that our partnership is about getting the best outcome by putting their data to work."

Hexagon's mining division solves surface and underground mine challenges with proven technologies for planning, operations and safety.

Dampney says the company also has significant ambitions around supporting sustainability and is already a leader in the future of mining technology and solutions for the life of mine.

HEXAGON DRILL AND BLAST VICE PRESIDENT JAMES DAMPNEY.

"Sustainability ties back to this new technology as it allows for mining in a far more intelligent way, using data to make smarter decisions, and this positively impacts and benefits the environment," Dampney says.

"It is really a testament to the strength of the global mining industry with the people that we have and the talent available.

"We are fortunate to be attracting really high-calibre individuals who really want to work for a global technology company, providing our customers with transformational solutions across the entire mining value chain." AM