



Blast analytics guide improvements

Maptek™ BlastLogic™ blast analytics help operations identify trends to guide production improvements and reduce risk. Leveraging blast analytics at an operation can preempt risk, reduce production bottlenecks and eliminate potential cost issues.

An Australian coal mine wanted to quantify the impact of various blast plans on the operation. Existing methods relied on manual processes and inefficient software for analysing blasting results. There was no way of comparing and contrasting multiple blasts.

To leverage blast analytics, the first step was to find a way to instantly connect and visualise data. Reliable information was needed for quick recognition of factors impacting drill and blast at critical stages, so that timely action could be taken.

Maptek™ BlastLogic™ software provided a site wide solution for all stakeholders. BlastLogic enabled instant access to drill and blast data. Visualisation in a 3D environment provided a platform for logical planning and implementation of blasting activities.

BlastLogic compared the design with implementation and outcome, providing important production insight across multiple mining areas.

No additional workload was placed on engineers and blast crews, allowing more time for engineers to focus on design improvement and operational collaboration.

Blast crews used the BlastLogic tablet in the field to capture critical data. All information was instantly synchronised back to the server. Charge plans were dynamically updated based on real time dipping data from field crews. Direct interface with support drill navigation systems ensured consistent data, which was reconciled back in the office.

Overloading of explosives was avoided using visual warnings displayed on the BlastLogic tablet and desktop software. Planning and operations teams could work in sync to fine tune cost and performance differentials.

The greatest benefit came from the production insights gained through cataloguing blasts by conditions, performance and region. Multiple field and office users accessed the same data and worked together to identify areas for improvement.

As a result, this operation achieved more cost effective blasting, with a 10% reduction in powder factor and faster timing.

Site users found the flexible BlastLogic workflow particularly helpful when applying changes and performing simple analysis. All updates were communicated on the fly, reducing down time and minimising chances of miscommunication.

Operational knowledge was linked effectively with blast by blast insights and production details. This meant that the operation could use blast analytics to uncover connections and trends that emerge in their drill and blast processes.

To see all of the latest features in BlastLogic 2.0 visit www.maptek.com/products/blastlogic/

