

Incident resolution with BlastLogic

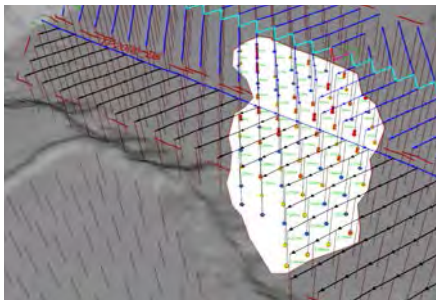
Maptek™ BlastLogic™ effectively manages all operational drill and blast data, streamlining incident resolution and fostering continual improvement.

The challenge

When an incident occurs at a mine there is an urgency to find out what happened and why. Survey locations must be cross referenced with drill designs, timing and videos. Then comes a search through files for shot reports and explosives loading sheets. It can take several days before you really know the full picture.

Now you need to consider how to make it easier next time, and, more importantly, how to make sure there is no 'next time'!

Imagine the productivity gains if all site drill and blast data was connected, centrally stored and able to be instantly recalled for analysis. This is the Maptek™ BlastLogic™ solution.



The scenario

Consider the scenario where production crews have run into significant hard digging in the pit. A truck operator has been injured when loading oversized material. There is minor damage to the digger as well. Why did this happen?

The first step is to identify where the problem occurred. BlastLogic steps you through the complete history of the area.

You can view the drill design against the as-drilled data. Other questions arise.

How much water was present, what was the downhole delay and its associated timing, and were there any post blast effects? Check the explosives used and any misfires. Video footage can also offer important information.

BlastLogic allows all of this blast information to be found, reviewed and reported in 1 hour.

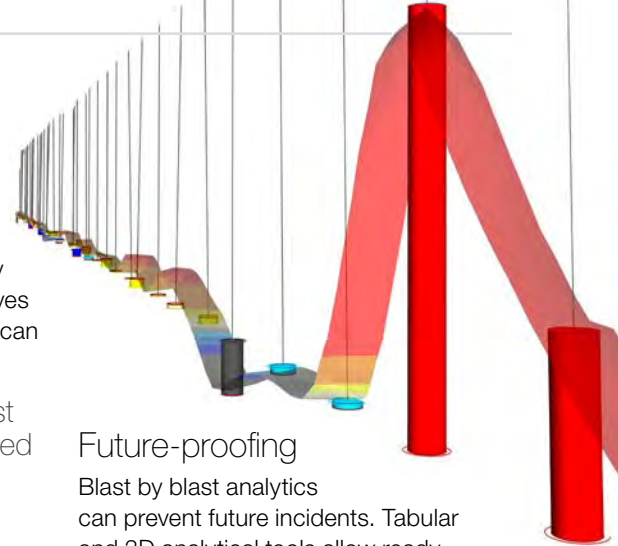
Having determined the cause of the problem, a solution can be implemented and tracked.

The solution

Under-drilled or backfilled holes are a common cause of hard digging incidents. BlastLogic displays your entire drilling history for comparing holes to design. Is there a link between bad holes and an operator or drill rig? Should hole savers be used to prevent excessive fall back? Daily visual feedback from BlastLogic informs operators how close they are to target.

Backfilling and explosives loading performance can be improved. If current accuracy is 80%, just set a new goal of 85% and track accordingly. Custom properties can record observed blast performance, or indicate whether hole savers were used.

Checks at critical stages can track adherence to the blast plan and ensure that certain criteria are met, such as timing design approval.



Future-proofing

Blast by blast analytics can prevent future incidents. Tabular and 3D analytical tools allow ready comparison of parameters across multiple blasts. You can identify factors impacting performance, look for trends and plan improvements.

Performance summaries by hole or blast enhance pre-design research or month end reviews. For example, you can load all previous year holes, display the powder factor trend for the lower bench and highlight misfires.

What products were used in the shot and who was in charge? The answer is instantly displayed. Focus can then shift to improvements, by filtering data for best dig rates or lowest vibration. New tie up designs can be tracked against post blast metrics such as digability or fragmentation.

BlastLogic takes the worry out of managing data so mines can identify problems faster and track a solution more effectively. Access to all drill and blast data drives advances in design and processes.

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