

CONSISTENT PREDICTABLE D&B

Maptek BlastLogic[™] provides operations with the tools and platform to achieve consistent, predictable and repeatable drill and blast.

Mining operations often use archaic, disjointed, multiple systems to perform routine drill and blast design, QA and charging activities.

A common trait is the inefficiency these systems introduce into validating and analysing information collected throughout the process. It's easy to see how the execution of drill and blast design often ends up being a grey area.

Some sites may do little or no QA when time and resources are tight. Instead it is left up to the shot firers to make adjustments to the blast design based on conditions at the time of charging, perpetuating greyness.

Data captured from drill navigation systems or the blast crew is not always reliable. Sometimes a drill rig may not achieve a good satellite fix, or the drill rods may be lost, producing an inaccurate drill depth. Handwritten data may be illegible. Entering tabular data on PDAs or tablets in the field can be fiddly.

Compounding the data integrity issue is the speed at which the data is made available to engineers for action. Compiling data into spreadsheets adds another manual step. If time is short, data may be merely collated and archived. Drill and blast know-how is also locked up in site personnel.

Given the inter-relationship of these factors and the variability of the drilling process and geological structures, a breakdown in any one area can result in sub-optimal blast performance.

Maptek BlastLogic[™] addresses these challenges by delivering immediate access to disparate drill and blast operational data within an easy-to-use and easy-to-view interface.



Compatibility with mine planning systems, like Maptek Vulcan[™], allows simple import of drill design data.

BLASTLOGIC AUTOMATICALLY MARSHALS AS-DRILLED INFORMATION FROM INDUSTRY-LEADING SUPPORTED DRILL NAVIGATION SYSTEMS.

The user then initiates automated validation against design, allowing easy clean-up of any errors in the drill data.

Dipping and backfilling tasks are streamlined with the BlastLogic Tablet. Displaying the spatial location of the drillholes and the proximity on the pattern enabled by GPS puts the user in good shape to correctly identify holes. Stylus or finger prompts help to quickly input data from drop-down lists linked to the last known hole depth.

Wifi synchronisation to the BlastLogic database gives instant data access, with screen refresh for the latest information.

Charge rules can be applied at any stage, calculating the most appropriate load plan for each hole, taking into account the number and order of decks given different depths and wetness of the holes. Rules are applied and stored across a blast pattern at the click of a button, enabling easy scenario planning and updates to blast design. Charge placement is checked for accuracy through 3D visualisation against known surfaces. The load plan can be refined hole-by-hole. The finalised blast design is published as a charge sheet to the BlastLogic Tablet where as-loaded information is recorded.

A Blast Summary Report consolidates all relevant information, providing an overview of the schedule, process data and load plan.

Blast approval documents, surveys, videos of the blast, or third party reports such as vibration are uploaded, stored and tied to a specific blast in BlastLogic, making for easy recall. Compliance reports, for example tracking drilling accuracy down to the operator and rig in a given shift, are easily generated.

Historical dipping information for specific regions ensures an accurate projection of over-drill can be factored into subsequent designs. The result is a reduction in re-drills and backfilling.

The advantages of immediate access to the right information to proactively allocate and manage resources are well known. So too is the benefit of central data storage, allowing for easy recall and review. BlastLogic delivers both.