

OPEN CUT DRILL & BLAST

The Open Cut Drill & Blast module in Vulcan allows preview of a drill and blast pattern before it is set, ensuring potential layout problems are solved early, saving time on the ground.

HOW DOES IT WORK?

INPUT

Open Cut Drill & Blast includes specialised tools for designing drill patterns on pit benches.

An existing polygon object is required to generate a drillhole pattern.

Blast design options include:

- > Create rectangular, triangular and equilateral patterns
- > Create vertical or inclined holes on flat, inclined or undulating surfaces
- > Use the Explosives Library to assign explosives attributes to individual holes; attributes include the explosive manufacturer, name, cost, etc.
- > Design the detonation sequence
- > Import updated pit surveys to the blast design
- > Create pre-split holes

OUTPUT

Once data is entered, the blast pattern is displayed.

Choose from the following options once the pattern is produced:

- > Export drill locations to survey instruments
- > Create basic explosives analysis and cost reports for each design
- > Produce a blast plot for operators
- > Review drillhole warnings to ensure a safe blast
- > Reverse row direction for easier manipulation

BENEFITS

1. Trial blast patterns quickly and efficiently to discover the optimal design.
2. Reduce consumable costs and increase production value by maximising equipment efficiency.
3. Save time and reduce errors with automated editing of multiple holes.
4. Ensure accurate blast designs with up-to-date information.

YOUR QUESTIONS ANSWERED

Can I insert holes midway between previously created blast holes?

Yes. The double stitching option allows you to insert holes between previously created blast holes using the same or completely different hole design parameters.

How do I find the information for each drillhole?

All of the information about a drillhole is contained in a datatip. Simply hover your mouse over the drillhole and all of the attributes that have been entered will be displayed.

Can I customise the information stored in the datatip?

Yes. Information displayed in the datatip can be customised to personal preferences.

Can I edit the holes individually?

Yes, you can edit holes individually or as a group. There are alternatives for maintaining the 2D collar location, or in the case of angled holes the 3D vector of the blasthole. Holes can also be selected within a blast by echelon, the direction of rows can be reversed to allow easier manipulation of holes within a blast, and blasts can be renamed.