Deswik.UGDB
UNDERGROUND DRILL & BLAST

Fast, efficient underground drill and blast design

A Deswik.CAD module, Deswik.UGDB has been developed to manage the specialized needs of drill and blast designs for underground mines. Rapidly site rings, slots, drill holes either manually or through sophisticated automated tools, to deliver a comprehensive ring design every time. Ensure consistency by incorporating standard design metrics for drill rig parameters, explosives and detonator placement to prepopulate your design. Define blast pattern with primers, explosives and timing sequences to produce detailed blast designs and solids.

Generating a drill and blast plan is only half the job and Deswik.UGDB ensures that communicating the plan is just as easy. Rapid plotting from pre-configured layouts, direct export to drill rig guidance software and survey formats keeps everyone, from drillers to surveyors, working together.

SUPERIOR DESIGN TOOLS
» Intuitive manual or automatic layout of drill holes with relation to design and existing voids.
» Set design parameters for parallel or fanned holes including fixed toe spacing, collar spacing or angle changes.

LONG HOLE WINZE DESIGN
» Use set templates to rapidly insert a winze adjusted to dip and length, and charge the holes.
» Insert cut-off-slot rings with a long hole winze in line with the holes or a specific number of rings.

DYNAMIC UPDATING
» Update holes layouts against survey and design changes, change the drill rig or reverse the drill look direction.
» Copy designs between rings – new design automatically adjusts to the profile of the next ring slice.

BLAST DESIGN
» Define charge holes and primer locations including customizable decking layouts with multiple explosive products.
» Set blast timing for holes in various patterns and sequences and animate the resultant blast.

BLAST SOLIDS
» Slice the original stope solid against ring layout or generate directly from the ring designs.
» Interrogate the blast solids directly and report against the physical values in a plot.

FLEXIBLE PLOTTING SOLUTIONS
» Plot any combination of plan and section views for ring, winze and break-through designs.
» Rapidly set-up plot templates with tables referencing key design information that updates for each plotted ring design.

DATA EXPORTING
» Export to IREDES in Atlas Copco or Sandvik data format and upload the design directly to the drill rig.
» Distribute ring designs and laser lines to surveyors in either DXF or CSV formats.