

Vulcan Minemodeller Underground

Vulcan MineModeller Underground allows engineers to design, evaluate and maintain daily underground mine operations. Users can generate different designs for each mining scenario, evaluating and comparing results.

Base Modules

Triangulation

- Create/edit 3D surface and solid triangulations
- Generate contours
- Register images with triangulations for better visualisation

Vulcan 3D CAD

- Design and digitise lines, polygons, points and text
- View, analyse, interactively edit 3D data

Data Transfer

- Import and export data between Vulcan and other applications
- ODBC connection to SQL Server™, Oracle® and MS Access™

Plotting

- Configure user-defined plot style sheets with title blocks and user prompts
- Edit and regenerate plot files
- Set up and generate single plots using a wizard-style interface
- Generate multiple plots with batch-style interface using existing data specs

Add these modules

- + Channel Sampling
- + Interactive Polygon Reserver
- + Drill & Blast Design
- + Survey
- + Stope Optimiser

MineModeller Underground Modules

Grid Modelling

- Define surfaces as grid models
- Perform complex grid to grid operations
- Create stratigraphic, structural and grade/quality grid models using an automated modelling process
- Generate and analyse reserves by overlaying polygons onto grids to create reserve limits

Statistics

- Statistical analysis of Vulcan databases, grids and block models
- Automatically output results and charts in Microsoft® Excel™

Block Modelling

- Store and use information via regular cells or subcell geometries
- Conduct inverse grade estimation
- Support large number of blocks - add, delete or modify variables in real time
- Create custom reports, including grade tonnage curves

Mine Design Underground

- Design ramps, developments, stopes, construct/edit surfaces, solid models
- Optimised design of blocks for cut and fill, sub-level stoping, room and pillar mining methods
- Inverse distance routines for creating grade models
- Preview designs before applying settings
- Design declines with intermediate access points using the automatic Ramp tool
- Interactive ramp editor allows independent modification of ramp sections
- Transition gradient can be specified at the start, middle or end of the ramp

