Vulcan MineModeller Open Pit

Vulcan MineModeller Open Pit provides the tools for mine engineers to design, evaluate and maintain mine operations. Surfaces and design lines can be easily updated with the latest data for generating production reports.

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
- Pit Optimiser
- Grade Control
- Cut-off Grade Optimiser
- Dragline
- Haulage Profile
- Chronos Scheduler
- Survey
- Interactive Polygon Reserver
- Drill & Blast Design
- Interactive Road Design
- Short Term Planner

MineModeller Open Pit 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
- Supports large number of blocks - add, delete or modify variables in real time
- Create custom reports, including grade tonnage curves

Mine Design Open Pit
- Design pits with multiple ramp systems to transform non-operational optimised pit shells into mine designs that meet engineering and geotechnical criteria
- Design multiple pit phases and dumps
- Construct/edit surfaces, solid models
- Use grade interpolation by inverse distance method for resource models
- Determine volumes and tonnages to quickly evaluate designs for economic, quantitative or volumetric factors
- Rapid Pit Design tool for strategic mine design evaluation
- Save the design sequence and replicate on different strips (stratigraphic pit design)
- Automatically generate triangulated surface of the highwall profile (stratigraphic pit design)