A 3D geological model showing a cross-section of a mine with various colored layers (purple, pink, yellow, blue) and a grid overlay, representing different rock strata and mining levels.

Powerful 3D Modelling & Mine Planning Tools

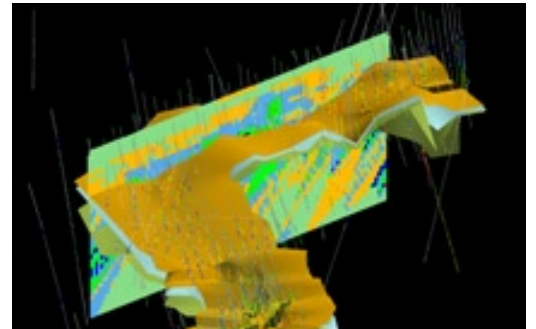
- Innovative functionality to improve daily productivity
- Powerful modelling and planning tools
- Easy to learn, and easy to use

Maptek Vulcan™

Maptek Vulcan™ is the leading 3D modelling and mine planning software covering the full mining cycle. More than 4,000 licences are installed at 800 sites worldwide.

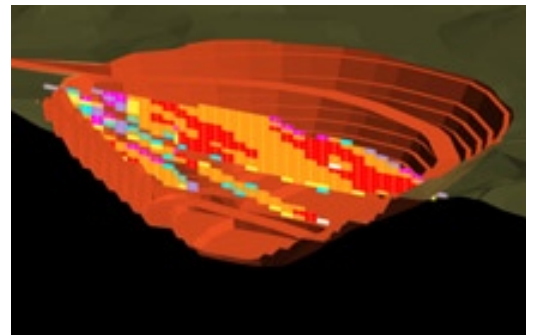
Geology

- Store drillhole and sampling data
- Link to external databases through ODBC
- Easy visualisation of 3D drillhole information
- Interactive 3D geological modelling
- Powerful stratigraphic modelling tools



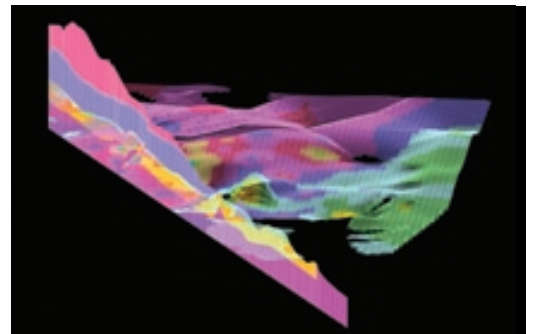
Block Modelling

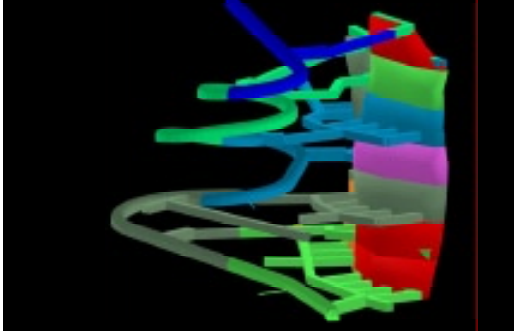
- Create rotated block models
- Sub-blocking capabilities to accurately model geological contacts and boundaries
- Unlimited variable storage capabilities
- Generate sections and use dynamic slicing
- Incorporate geological wireframes into the block model
- Visualise and plan the mine based on block model data
- Automatically exclude mined-out areas for enhanced grade reconciliation
- Powerful reserving tools; detailed breakdown of information (benches, stopes etc.)



Resource Estimation

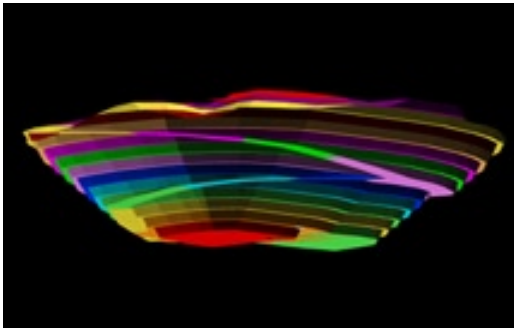
- Full suite of statistical tools
- Built-in variography tools including directional variography
- Geostatistical analysis: Kriging, IVD, Simulation
- Multiple parameter analysis
- Store estimation results in block model
- Calculate reserves using triangulations





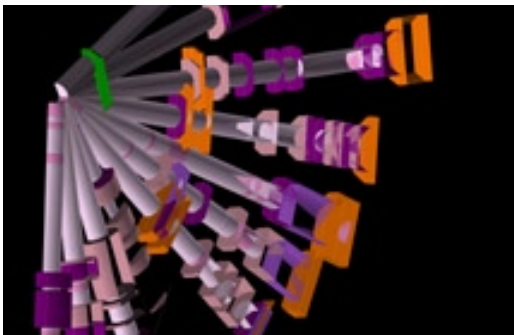
Mine Design

- Tailored pit and dump design tools, including ramp design
- Smooth transition between varying batter and berms (face angle and bench width)
- Built-in pit optimisation tools (Lerchs-Grossman, Floating Cone)
- Apply multiple batter angles, bench heights and berm widths
- Interactive editing of underground designs
- Automatic decline generator based on user-defined constraints



Scheduling

- Schedule open pit and underground environments
- Built-in target based scheduler (Chronos)
- Short, medium and long term scheduling
- Apply resources/equipment
- Dynamic analysis and feedback between the mine design, geological model and schedule
- Graphical interactive scheduling of reserves using triangulations and polygons
- Interface to Minemax iGantt scheduling products



Other Vulcan Modules

- Survey: Establish a survey peg database and import straight from your survey instruments into Vulcan
- I-Roads: Create detailed surface roads
- In-depth drill and blast design including explosive tie-in design
- Haulage Profile: Determine haulage costs using block models
- Interface with ArcGIS
- Full 3D geotechnical modelling toolbox: Plot stereonet, calculate daylight windows and toppling



Improve efficiency with Vulcan

Vulcan software provides the user with the world's best 3D interactive modelling and planning package. It is the total solution of choice for the largest and best mining companies in the world. From geology to mine planning and scheduling, Vulcan delivers functionality, efficiency and improved productivity to its clients worldwide.

Contact Maptek to find out how Vulcan, and Maptek's other products - I-Site, MineSuite and Services - can add value to your projects and operations.



Cancún	52 998 892 0030
Denver	1 303 763 4919
Belo Horizonte	55 31 3224 4888
Lima	51 1 476 0077
Viña del Mar	56 32 269 0683
Edinburgh	44 131 225 8447
Johannesburg	27 11 918 0829

Adelaide	61 8 8338 9222
Brisbane	61 7 3316 2800
Newcastle	61 2 4968 7100
Sydney	61 2 9957 5554
Perth	61 8 6211 0000

info@maptek.com
www.maptek.com