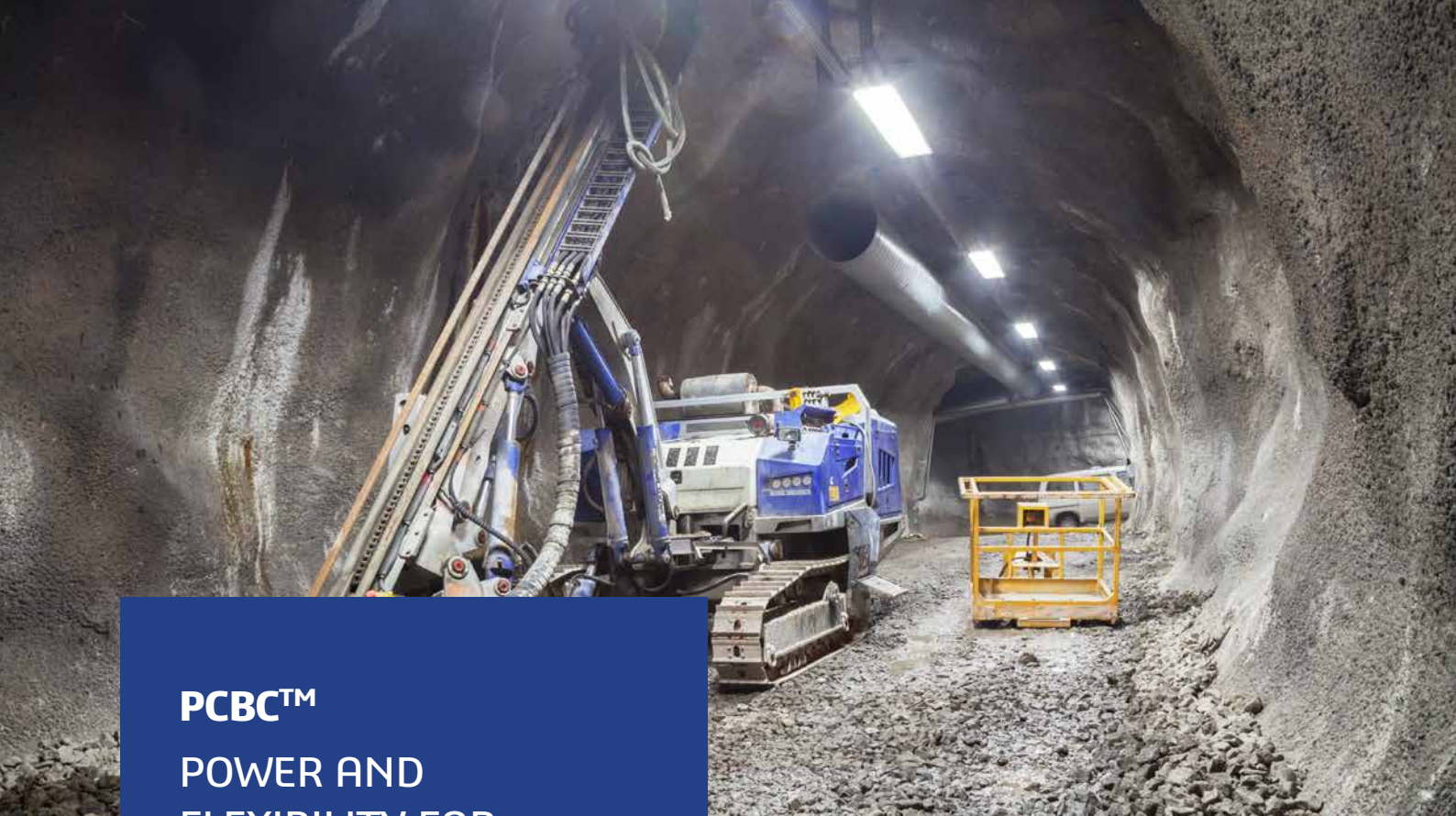




GEOVIA ROLES EXPLORING THE GEOVIA CAVING PORTFOLIO

PCBC is used by virtually every mining company involved in block caving who depend on it to improve profits through better mine plans, schedules and production management.

PCBC clients realize substantial increases in deposit value through more accurate resource estimations and reports, while benefiting from better dilution management and geotechnical stability.



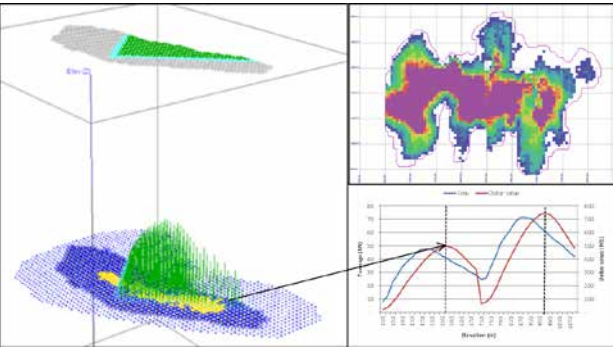
PCBC™ POWER AND FLEXIBILITY FOR YOUR BLOCK CAVE OPERATION

// CAVE MID-TERM PLANNER

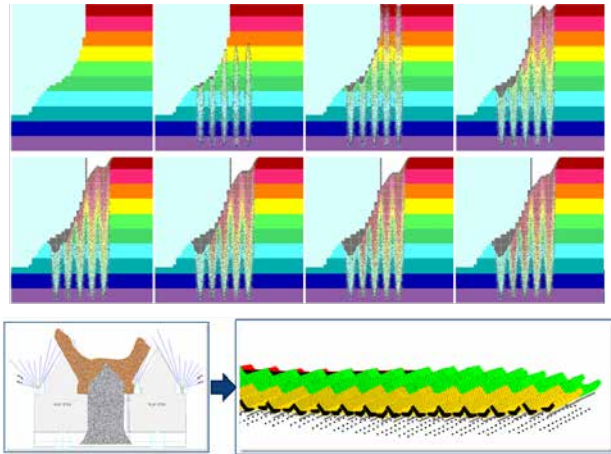
GEOVIA Cave Mid-term Planner enables the long and medium-term planning of a caving operation. Easily generate a production that allows you to improve the value of a project/mine while maintaining a practical mining plan and satisfying complex cave management logic adding multiples constraints, such as tonnage, grade and equipment performance.

// CAVE FOOTPRINT OPTIMIZER

GEOVIA Cave Footprint Optimizer enables a quick study of different footprints at different elevations, useful for pre-feasibility studies. It allows for sequencing factored into discounted cash flow and multiple sector scheduling which includes multi-lift.



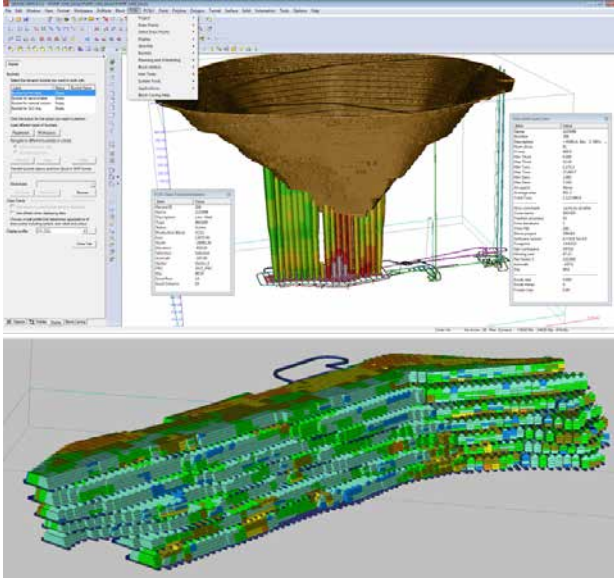
- Find the best elevation and orientation for locating a new extraction horizon for block and sub level caves
- Optimize the draw strategy for SLC
- Reduce risk for large capital projects by evaluation of multiple scenarios.
- Adjust the development rate, production rate, and mining sequence all within the Footprint Finder.



- Create realistic undercut sequences in PCBC with operational constraints
- Design the undercut level with exact ring shapes and precise grades
- Use alternative flow models to help determine the best model to be applied to any site situation
- Have more flexibility in multi-lift caving environments
- Obtain a complete residual block model directly after the analysis

// CAVE LONG-TERM PLANNER

GEOVIA Cave Long-term Planner enables the long and medium-term planning of a caving operation, including detail analysis per draw point, flow model analysis, and calibration. It also automatically generates tunnels for a cave design - both for Block and Sub-level Caves.



Better grade modeling and forecasting by using multiple material mixing options

Evaluate long-term planning scenarios

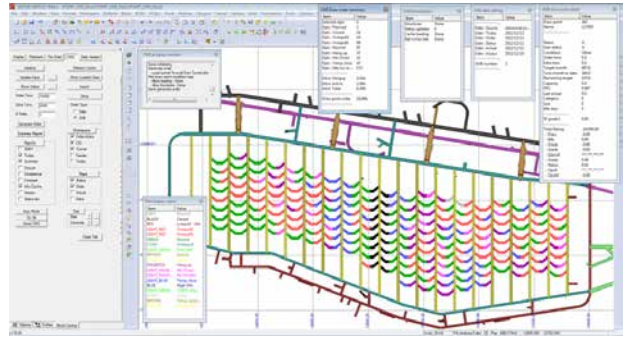
Define minerable reserves, allowing for easy delineation of practical footprints as well as sensitivity studies of price and mining cost variations

Generate numerous production schedules to study the interaction of the key scheduling parameters

Run concurrent analysis of results in Microsoft Excel

// CAVE OPERATIONS SCHEDULER

GEOVIA Cave Operations Scheduler helps manage the cave by storing past tons mined from draw points and using these to generate new daily draw orders for daily or shiftily operation.



Keep production schedules current under dynamically changing conditions

Spend less time creating scheduling options that satisfy daily production (grade, dilution, contaminants, etc.)

Perform powerful production scheduling which can rapidly be updated and modified for real production statistics

Use strong interface capabilities with LHD dispatch and monitoring systems

Accurately predict the grade for selected draw points in the short-term

Our 3DEXPERIENCE® platform powers our brand applications, serving 11 industries, and provides a rich portfolio of industry solution experiences.

Dassault Systèmes, the 3DEXPERIENCE® Company, is a catalyst for human progress. We provide business and people with collaborative virtual environments to imagine sustainable innovations. By creating 'virtual experience twins' of the real world with our 3DEXPERIENCE platform and applications, our customers push the boundaries of innovation, learning and production. *Dassault Systèmes' 20,000 employees are bringing value to more than 270,000 customers of all sizes, in all industries, in more than 140 countries. For more information, visit www.3ds.com

