

Strategic panel caving for cost-efficient mining

CaveLogic helps operations to simulate the optimum underground mining scenario based on their economic and geotechnical requirements.

A strategic, intuitive approach to panel caving delivers multiple benefits.

- Testing various scenarios on the desktop allows for predictive analysis
- Transparent calculations and 3D visualisation of results reduces uncertainty
- Availability of practical production plans with strategic schedules tightens integration
- Repeatable, auditable results help meet KPIs around safety, efficiency and productivity

As near surface minerals become more difficult to find, mining companies will be looking to exploit more of their underground projects.

Safety issues associated with mining in the complex underground environment mean good design and planning are more important than ever. Desktop assessment of what and how material will be mined removes some of the uncertainty for managing risk.

Developing underground stopes and drives is expensive and can be

hazardous. Automation methods are **the** key to reducing risk to personnel and equipment.

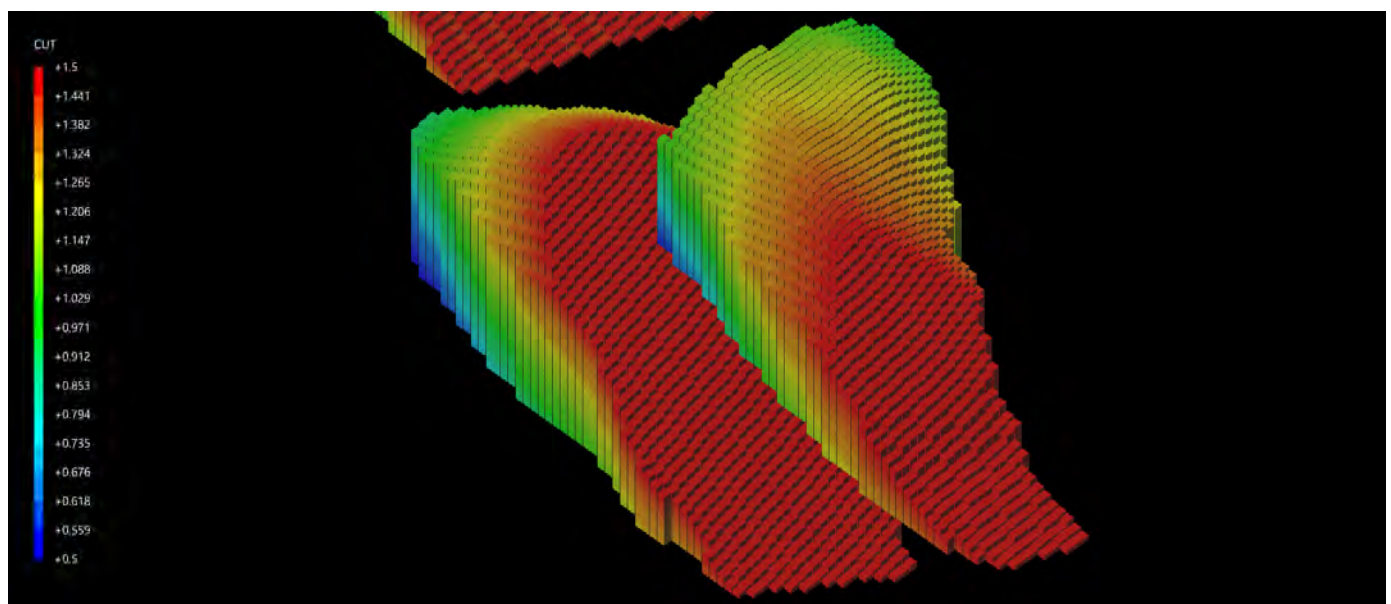
The method, when applied correctly, can be the most cost-effective underground mining method. A strategic approach which allows miners to generate production plans alongside economic schedules improves overall productivity.

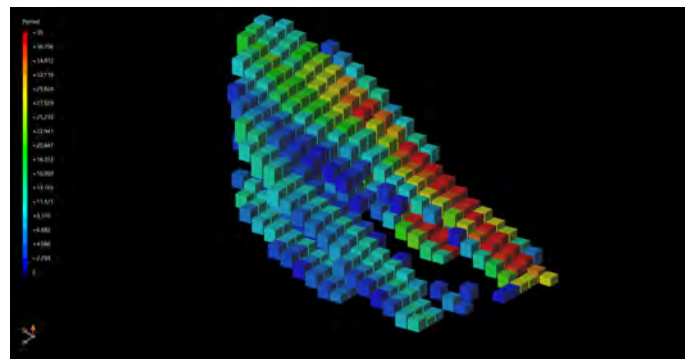
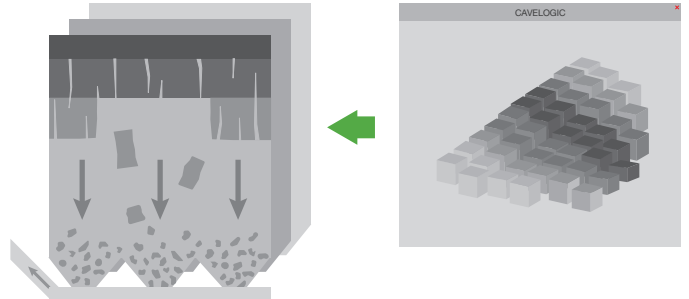
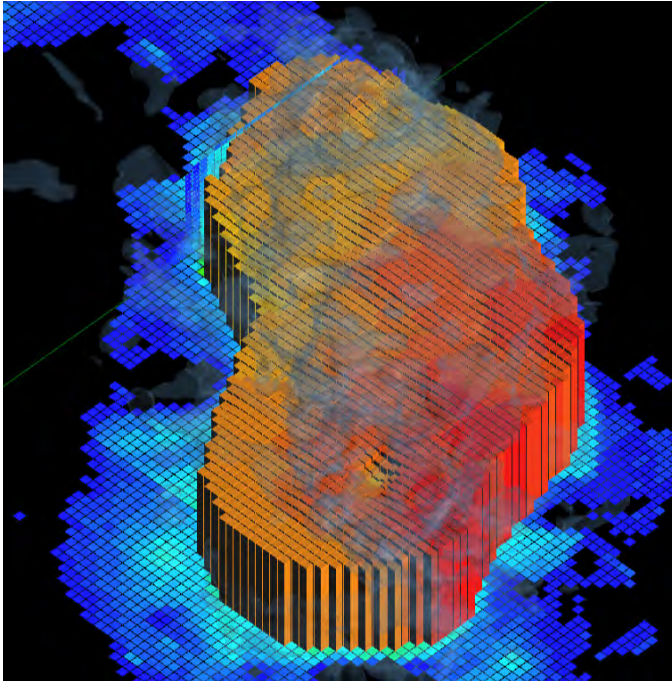
CaveLogic allows operations to run multiple scenarios using all of their economic, geotechnical and practical considerations before mining starts.

Planning engineers benefit from transparency across the entire process. Visualising results dynamically improves communication and provides informed decision support.

Mine planning is streamlined overall. Planners can track variables and processes, determine sequencing and generate production plans.

The strategic CaveLogic approach improves operational productivity through confident production planning.





Advantages

Flexibility: Dynamic approach to project complexity and individual customer needs

Productivity: Multiple parameters handled when generating alternative scenarios for assessment

Auditability: Transparent calculations and auditability of results for confident decision support

Communication: Readily visualise results for sequencing confirmation

Automation: Streamlined process improves productivity, safety and efficiency

Integration: Link projected economic value with realistic production plans

Accountability: Comprehensive reporting for effective management of dynamic processes

Evaluation: Investigate relative feasibility of underground and open pit mining methods