



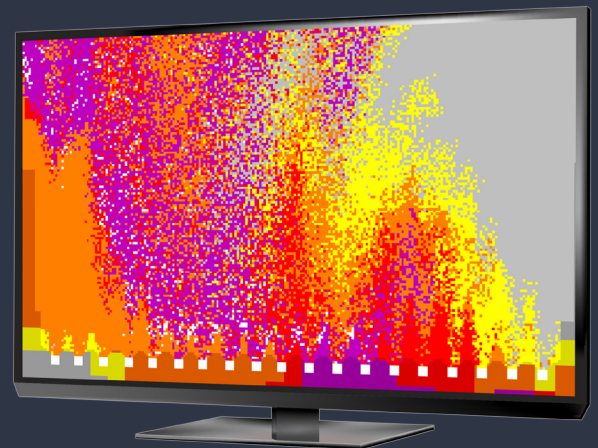
# Deswik.Caving

Cave flow modeling

Deswik.Caving models simulate cave flow for the Life-of-Mine of a caving operation for several outcomes such as recovery, dilution and production scheduling.

### How does it work?

Deswik.Caving is a Cellular Automata model. The block model is discretized to blocks of a user-defined size. Each of the blocks follows its own internal rules. The rules are based on probability of movement, material types, and user defined parameters such as expected width of draw.



## Benefits

### Delivering more value through effective mine planning

- Easy-to-use wizard-based process.
- Create a caving scenario which prepares a block model and schedules production for a flow simulation.
- Optimize production targets at draw points.
- Schedule production.
- Produce multiple scenarios with different ring sizes, schedules, flow characteristics etc.
- Integration with Deswik Products for inputs and outputs and development scheduling.



**Deswik**<sup>®</sup>  
Delivering mining efficiency

# Features

## Production optimization

- Models flow of rock within the cave Life-Of-Mine to give recovery and dilution forecasts.
- Optimizes production targets at draw points.
- Schedules production for block, panel and sublevel caving.

## Capabilities

- Automatic flow mechanics properties.
- Recovery reports generated by level, phase, resource classification, drawpoint and time.
- Sublevel and block caving capability within the same model.
- Allows for cave propagation within a simulation.
- Allows for fine and alternate particle properties.

## Small scale calibration

- Produces ellipsoidal approximations of draw similar to those seen in reality.
- Software has been calibrated against many operational mines.

## Integration

- Ease of importing .DXF files for cave back propagation.
- Integrates with the Deswik process.

## An integrated platform



**Deswik.CAD**  
Design & solids modeling



**Deswik.AdvUGM**  
Advanced underground metals



**Deswik.UGDB**  
Underground drill & blast



**Deswik.Sched**  
Gantt chart scheduler



**Deswik.SO**  
Stope optimizer



**Deswik.SOT**  
Schedule optimization tool



**Deswik.ASD**  
Auto stope designer



**Deswik.MDM**  
Mining data management