

# 2016.1

## Deswik Suite



### New Graphics Engine

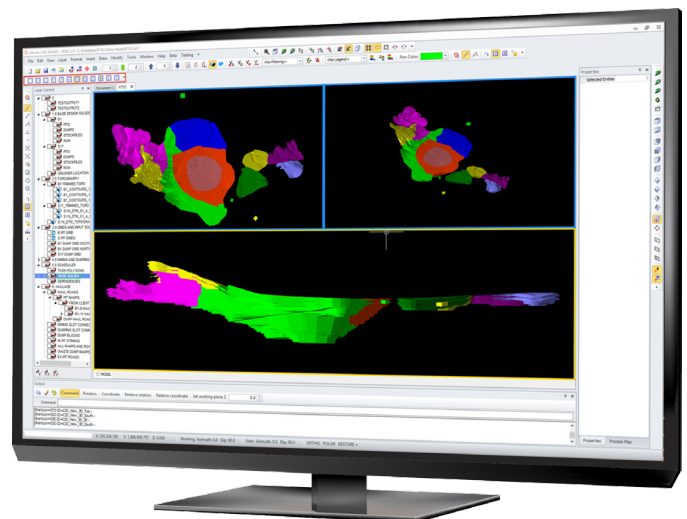
- Increased general speed including speed of turning layers on / off and interactive filtering.
- Smooth elevation coloring.
- Antialiasing options for improved display quality.
- Multiple viewports that can be independently rotated and sliced.
- Overlays - order surfaces to background.
- Improved point cloud solid generation.
- Solid slice selection.
- Enhanced snapping precision.

### Block Model Manipulation

- Block model polygon generator.
- Block model display dialog overhaul.
- New commands: Join, Delete, Coalesce, Fields Copy.
- Pseudoflow - generate closed solids at the end of the processing pseudoflow.
- Surface from block model command: creates polyface stage or shell surfaces from a block model.

### New tools

- Grid manipulations - dip and thickness grids.
- Pivot generation in interrogation.
- Underground reconciliation - wall increments, as built grouping for plotting and visualization purposes.
- Pit design and planning
  - Interactive block generator for open pit mines, in a shorter term space. Allows users to create blocks interactively and immediately see the results.
  - Signal tower coverage modeling - allows users to determine the coverage and effectiveness of radio signal towers around an open pit.
- Integration: VentSim, COMET.



### Enhanced Design capability

- Coordinate table
- Polyhatches - automatic generation
- Automatic decline design
- Vertical faces in tessellation
- Combos in block text
- Drawing defaults
- Dynamic surface editing
- Display legend button
- Batch printing
- Color palette editing
- Drawing styles
- Offset to minimum mining width
- Polyline trimming improvements
- Google-friendly transformation rules
- Autocad style command line inputs

### Process maps

- Plugin executing feature: execute main menu commands from Deswik.IS and Deswik.LHS plugins from nodes on a process map.
- Selected entities on interrogation and formulae.

### Survey functionality

- Direct integration with Leica Instruments:
  - Imports jobs directly from DBX job files.
  - Uploads reference data and survey stations from stations database.
- A multi-user stations database stores all of the survey stations set up by the survey team as well as a ledger of the imported jobs.
- Supports either a standalone stations database file or directly integrates with Deswik.MDM for enterprise sites.
- Applies display styles to the imported survey data so that the observations appear as polylines, points, stations or inserts.
- Loads survey stations from the database to Deswik.CAD for plotting or reference.
- Exports set-out and reference information to a variety of formats including: Leica DBX Job files, \*.DXF, \*.STR or user-definable format text files.
- Store, edit and label attributes per vertex on polylines.
- Add a laser line offsets table to a plot.
- Flatten a wall outline polyline to a floor centerline polyline.



**Deswik.IS**  
Interactive Scheduler

- Task graphics can now be stored in scheduler.\*
- Automatic dependencies improvements\*: use Deswik.Sched filters instead of Deswik.CAD filters. Limit dependencies to a minimum and maximum length.
- Create vertical tunnels at a fixed azimuth.
- Update schedule after survey update.

\* Deswik.SViz license required



**Deswik.LHS**  
Landform & Haulage

- Rules-based slot connectors.
- Deswik.Sched dump sequencing.
- Deswik.IS style dependencies.
- Field parsing for schedule updates.
- Open Pit Metals improvements.
- Dump tent in dump lift management command: supplies a surface which represents what the maximum extents of the dump can be.



**Deswik.UGDB**  
Underground Drill & Blast

- Improved IREDES export.
- Drill hole between two drillholes.
- More manual charging controls.
- Pivot text height setting.



**Deswik.Sched**  
Gantt Chart Scheduling

- Super Fast Mini-Leveler
  - Massive speed increase
  - A "Lite" Scheduler for rapid scenario evaluation
- Resource leveling
  - Speed improvements (2-5 times faster)
  - Priorities by date
  - Task exclusion rule
- Resource pool priority cascading.
- Materials added as a concept to simplify production field handling.
- Production fields dependency graph.
- Simple resource path generation.
- Resources remain in place with task while blocking option in blocking rules.
- Ability to store graphics.
- Automatic dependency rules, Import dependencies from another schedule.
- Break tasks in master schedule.
- Task fence selecting and moving.
- Text formula custom field.
- Database reporting.
- Activity Cycles for short term scheduling.
- Merge settings between projects.
- Multiple calendar rules in report options.
- Annotation on grouped tasks.
- COMET importer.
- Multiple values in Gantt.
- Rules-based resource path generation.
- New report calculations: GroupedSum\_Average, GroupedSum\_PeriodTotal, GroupedAverage\_Average, GroupedAverage\_PeriodTotal.
- Time variable constraints and availabilities.
- Deswik.IS milestone field.
- Split connector display.



**Deswik.SOT**  
Schedule Optimization Tool

- Count capacity profiles.
- Specify scheduling period separately for each resource capacity.
- More detailed specification of recovery factors.
- 'Trigger' activities can modify plant capacities, have associated capital costs, associated changes in recovery and operating costs.
- MaxLag property ensures fill activity occurs within specified time. Use MaxLag property to limit delay between successive development activities.
- Operating costs for an activity can be aggregated from operational resource costs, or based on multiple activity properties.
- Bar charts allow for a comparison of alternative schedules in terms of production, cash flow, or other properties.
- Efficiency improvements for scheduling and sliding operation.

# NEW MODULES

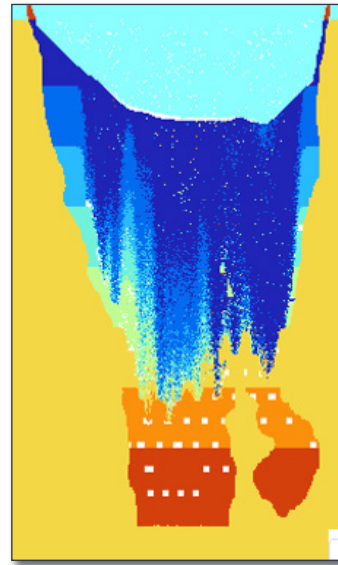


## Deswik.Caving

Cave Flow Modeling

### Caving simulation

- 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.
- Integrates with the Deswik process.
- Generates recovery reports by level, phase, resource classification, draw point, and time.
- Allows for cave propagation within a simulation.
- Allows for fine and alternate particle properties.



## Deswik.UNO

Underground Network Optimization

- Decline optimization tool.
- Underground level development network optimization tool.
- Produces planar and decline centerlines which have been optimized on cost.
- Dramatically reduces the time it takes to produce access.
- When combined, Deswik.UNO together with Deswik.SO (slope optimizer) reduces what previously took weeks to hours.
- Scenario manager.
- Simple wizard-based configuration.
- Supports complex decline networks.

