Bridging the planning gap between designing and scheduling
The only truly integrated mine planning solution for all mining methods

Bring mine designs and schedules together

Deswik.IS brings together the power of Deswik.CAD and Deswik.Sched, dynamically linking your mine designs and schedules, enabling you to spend more time analyzing and planning scenarios rather than manipulating data. Gantt chart schedules can be modified and updated directly from the graphical environment, setting dependencies and specific resource input paths. Schedule-driven graphical animations give instant feedback on your planning changes, facilitating rapid schedule development.
New problems demand new solutions

Leveraging decades of professional software development experience and a proven history of building technical mining applications, Deswik provides industry-leading tools to ensure that mine plans are robust, transparent and achievable. Our software is developed to take advantage of the latest high performance technologies and cutting-edge computing algorithms, all accessed through a flexible, intuitive interface.

By avoiding the legacy issues faced by other older packages, coupled with our outstanding customer support, we provide complete solutions to meet the demands of modern mining. Deswik is committed to delivering comprehensive tools and quality support for all mining sectors.

Delivering more value through effective mine planning

» Capable of planning any mining method (Underground or Open Pit) or commodity
» Direct integration of the Deswik.CAD 3D design environment with the Gantt chart-based Deswik.Sched.
» Instant feedback with animated schedule visualization and dynamic updating between design and schedule.
» Comprehensive toolbox automates the conversion of design entities into schedule tasks with linked 3D solids.
» Define complex mining processes through derived tasks such as drill and blast or dragline re-handle passes.
» Create bench blocks or generate solids from reserve solids, tunnel centrelines and stope sections.
» Specialized tools produce pit shell solids, bench block polygons, ore drive centrelines and assign attributes.

» Innovative graphical interface with a flexible, rules-based approach delivers repeatable and auditable creation of complex mining sequences.
» Create and edit schedule relationships between activities using graphical dependencies
» Automatically generate dependencies using spatial or attribute based rules
» Graphically set resource paths for greater control of equipment sequencing.
» Effortless transfer of data to bring schedule information such as resourcing onto the design solids.
» Update mine plans against survey data, cutting solids and re-proportioning schedule tasks to the survey date.
» Superb graphic reporting such as period progress plots, legend coloration and 3D animations.
» Project merge facilitates multi-user planning of different mine areas or timeframes for true integration across a project.
Seamlessly Merges Design and Scheduling

All your information in one place

» Take any design entity in the Deswik.CAD graphical platform and transform it into a task solid with a directly linked schedule task created inside Deswik.Sched; update, re-create, delete and manage task solids with any changes dynamically reflected in their associated schedule tasks.

» Create a single schedule representing your long, medium and short term planning activities.

» Creates a direct link in real time – don’t waste time exporting data or settings files that have to be uploaded and managed between different modules.

» Manage any combination of open cut and underground, coal and metaliferrous mines from a single interface using universal processes.

» Change the linked Deswik.CAD and Deswik.Sched files as needed; multiple schedule scenario files can all be matched against a single set of task solids.

» Record schedules as customizable animations to be shared across all stakeholders, keeping everyone up to date.

Process Driven

Intuitive, transparent and repeatable

» Wizard-based or manual project setup applies intuitive, process-driven routines to generate schedulable tasks from mine design data.

» Develop derived tasks to represent a task that is involved in the cycle of extracting the main mining block; drilling and blasting could both be derived tasks for a mining extraction task.

» Use linked attribute data to build a comprehensive set of activity type rules that define how a design entity is transformed into a task solid with linked schedule tasks.

» Incorporate solids Boolean processes during task solid creation to cut solids against each other and remove overlapping volumes; that say: remove development drives from within stope solids.
Inclusive Design

Gain access to advanced design tools

» Take a series of pit or dump shell surfaces and cut them against a starting topography, and each other, to generate a series of closed solids.

» Cut pit stage solids against grids to generate polygons representing the bench block shapes to be mined on each bench of a pit.

» Create polygons and solids to represent an ore drive, using centerlines and polygons defining the ore limit outline.

» Automatically or manually assign grouping or graphic attributes to your design entities before, during, or after task creation with a number of attribute assignment tools.

“Comprehensive toolbox automates the conversion of design entities into scheduled tasks”
**Sequence Visualization**

Powerful, graphical mine sequencing tools to drive understanding

» Graphical dependency tool provides visual representation of every single task dependency in the linked schedule.

» Intuitive manual linking between design graphics based on polygon, centroid or solid selection.

» Build comprehensive sets of automatic dependency rules that can be re-run for new or updated designs as required.

» Dependencies are automatically updated to the schedule in real time as they are created.

» Access animation mode while creating dependencies to immediately visualize changes to the mining sequence.

» Option to assign schedule resources to tasks graphically as part of the dependency creation process.

**Update and Integrate**

Bring multiple plans together and update against survey

» Automates update of existing schedules from surface or underground mine surveys, cutting and re-proportioning tasks and rescheduling from the survey date forward.

» Automatic and on demand batch update functions transfer information from your design to your schedule and back again within the software – no need to save out files to load into different modules.
“Keep all stakeholders up-to-date with animated schedules”

Powerful Communication Tools

Merge graphics and schedules to communicate the whole story

» Cut tunnels and outlines based on the meters scheduled to be mined across a range of periods that you define.
» Set a mining direction for your overall design; define specific dates and then cut the task solids to indicate the face positions.
» Create stage plans that represent snapshots of the surface of your mining and dump faces at different times throughout the life of your mine.
» Manage different files related to the one mine plan by merging multiple base projects into one master project.
Our industry leading software solutions include:

- **Deswik.CAD**  
  Design & Solids Modeling  
  A powerful design platform with superior data handling – the next generation of planning tools for mining.

- **Deswik.AdvSurvey**  
  Advanced Survey  
  Fast, efficient point cloud handling.

- **Deswik.Agg**  
  Coal Seam Aggregation  
  Simplifying complex aggregation processes to create fit for purpose Run-of-Mine reserves.

- **Deswik.ASD**  
  Auto Stope Designer  
  Automatically create mineable stopes for narrow-vein vertical mining methods.

- **Deswik.DD**  
  Dragline & Dozer Section Designer  
  Automated dragline section design tool with direct integration into Deswik’s mine design, scheduling and data management tools.

- **Deswik.DO**  
  Dig Optimizer  
  Design of optimum dig lines for open pit grade control.

- **Deswik.OPDB**  
  Open Pit Drill & Blast  
  Fast, efficient drill and blast design for surface mining methods.

- **Deswik.SO**  
  Stope Optimizer  
  Underground stope shape optimization using the industry leading SSO v2.0.

- **Deswik.UGDB**  
  Underground Drill & Blast  
  Fast, efficient drill and blast design for underground mining methods.

- **Deswik.IS**  
  Interactive Scheduler  
  Bridging the planning gap between designing and scheduling.

- **Deswik.LHS**  
  Landform & Haulage  
  Understand material movement like never before with scenario-based modeling and analysis.

- **Deswik.OPSTS**  
  Open Pit Short-Term Scheduling  
  Short-range ore control modeling and design tool.

- **Deswik.Sched**  
  Gantt Chart Scheduling  
  A powerful Gantt chart scheduler specifically designed to handle the challenges of mine planning.

- **Deswik.Blend**  
  Material Flow Modeling  
  Optimize your product value with material flow modeling for both coal and metals.

- **Deswik.SOT**  
  Schedule Optimization Tool  
  Realize more value from your resource with an NPV optimized schedule.

- **Deswik.MDM**  
  Mining Data Management  
  A spatial database and process workflow management tool.

- **Deswik.GeoTools**  
  Mapping app  
  Perform geological mapping on-the-go.

**Deswik Advanced Modules**  
Advanced functionality tailored to the specialized demands of the specific mining sectors.