Deswik.Sched
Gantt Chart Scheduling

Scheduling solutions that set us apart
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A dynamic, modern approach to scheduling

Deswik.Sched is tailored for the needs of mine planners. Encompassing both rate and duration-based scheduling, it easily handles the massive datasets that modern detailed planning requires; integrating production, ancillary and project activities with ease. Built around a powerful resource leveling engine, you will understand your resourcing better than ever, setting priorities and constraints designed to reflect the real world requirements of actual mining activities.

Unrestricted by timescales, long-term and short-term planning horizons sit seamlessly together in a single schedule. By accessing the comprehensive suite of flexible reporting options, you'll generate more accurate output data in more meaningful ways, including detailed Point to Point path analysis.

Intuitive and flexible, Deswik.Sched can handle the planning needs of any mining sector, underground or open pit, coal or metal.
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

» Handle massive datasets with our in-built mining functionality and familiar Gantt chart interface. Integrate production, ancillary and project activities with ease, using rate or duration-based scheduling.
» Perform multi-pass leveling and input path scheduling with our powerful and feature-rich resource leveling engine.
» Mirror real world objectives with dependencies, priorities, constraints and resource limitations.
» Develop detailed work calendars for scheduling and reporting from a shift basis through to Life of Mine plans in excess of a hundred years.
» Use a flexible combination of manual scheduling tools for short-term and automated long-term scheduling.

» Assign resources from common pools based on task priorities and resource availabilities.
» Build detailed and specific production rates with easy formula builders.
» Quickly customize your user defined pivot-style reports and drill into the details of a schedule.
» Record multiple schedule baselines to show schedule changes over time. Automated tools will keep schedules up-to-date.
» Operate Deswik.Sched as stand-alone, or integrate with Deswik.CAD and Deswik.IS.
» Use Deswik.SViz or our complimentary Deswik.vCAD for quick 3D visualization of existing Deswik.CAD designs.
Comprehensive Scheduling Functionality

Intuitive and familiar, with a powerful visual interface

» Universal application – model open pit and underground mines in the same schedule.
» Variety of configurable scheduler layouts, including:
  - Task and Resource Gantt charts
  - Linked reporting and 3D solid animation viewers.
» Generate complex scheduling data through powerful spreadsheet style formula tools, referencing data from a variety of sources, including lookup tables, range lookups, curves and global constants.
» Innovative task and dependency options including:
  - Hammock tasks
  - Percentage overlap dependencies.

Optimized Resource Utilization

The right equipment in the right place at the right time

» Applies a proprietary algorithm across the scheduled tasks in order to prevent over-allocation of resources by delaying lower priority tasks that cannot be resourced.
» Tiered priority structure incorporating scheduling priorities, resource priorities and resource input path.
» Sophisticated resource leveling functions including:
  - Fixed or preferential task grouping
  - Multilevel targeting and quantity constraints
  - Group constraints and blocking tasks
  - Task selection based on deadheading time.
» Interactive ‘stepwise’ troubleshooting of resource leveling process.

“A powerful Gantt chart scheduler specifically designed to handle the challenges of mine planning”
Integrated Reporting and Analysis

Better communication for greater understanding

» Unlimited layout options for pivot based reporting of reserve data, includes:
  - Task and resource filtering
  - Report based formulas
  - Incorporated graphing options.

» Live reports automatically recalculate when the Gantt time period is adjusted.

» Comprehensive suite of schedule analysis tools including:
  - Critical path analysis between selected tasks
  - Dependency and conflict filtering.

“Quickly customize your user defined pivot-style reports and drill into the details of a schedule”
Flexible Resourcing

Drive project value with better resource modeling

- Resources can have a specific rate or group of rates that will be applied depending on the task they are assigned to, accounting for variations in:
  - Design and environmental factors
  - Geological and geotechnical factors
  - Other factors such as efficiency and mining priorities.
- Apply time variant fields to reduce production rates over specific periods.
- Manual or rules-based resource assignment for individual or pooled resources.
- Resource specific priorities and proximity de-rating for equipment working close together.
- Incorporate resource-specific maintenance requirements including:
  - Maintenance events based on equipment hours
  - Retire and replace equipment based on a defined lifespan.

Schedule Integration

Bring your plan together

- Copy and paste reports and data directly into Microsoft Excel.
- Easy integration with a number of other scheduling packages.
- Extensive sub-projecting capabilities for multiple schedule inputs.
- Expand functionality with other Deswik modules including:
  - Deswik.CAD through Deswik.IS (Interactive Scheduler)
  - Deswik.Blend (Material Flow Modeling)
  - Deswik.LHS (Landform and Haulage)
  - Deswik.SViz (Scheduler Visualizer)
  - Deswik advanced sector modules.
Time Management

Account for every second

» Integrate long, medium and short-term plans in one schedule, set specified planning horizons.
» Scheduled task duration is calculated in seconds, allowing for infinitely customizable period reporting.
» Construct detailed time usage models in Deswik advanced sector modules, using:
  – Detailed rules based resource calendars
  – Grid based time usage data
  – Comprehensive time based reporting fields.

“Record multiple schedule baselines to show schedule changes over time”
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.