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#### **Deswik.OPSTS** Open pit short-term scheduling

## Short-range ore control modeling and design tool



# Dynamic design and tactical scheduling

### An integrated and interactive workflow tool to simplify short-term scheduling

Deswik.OPSTS' unique scheduling approach has been developed alongside a number of operating mines globally.

Deswik.OPSTS delivers value to mining operations by enabling engineers to rapidly identify where the higher grade resides and therefore target profitable areas of the bench earlier, thus increasing profitability. Usually time-consuming tasks, such as placing drop cuts, can be examined and their value forecast with a single click.

Deswik.OPSTS provides users with a simple user interface, suitable for any commodity in open pit mining. By integrating design, drill and blast, haulage, material flow and scheduling, it removes the need to move between different applications to understand the impacts of changes.

Short-term planners can instantly see the impact of schedule updates and communicate plans to production. Data and decisions can be shared between planning horizons and across functions, to communicate changes to anyone from long-term planners to drill and blast engineers.

## 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

- » Interactive schedule updates give instant feedback on changes made.
- » Simple reporting with data being fed automatically into the schedule at the end of shifts.
- » Customizable formulas for ancillary tasks save time and manual effort.
- » Integrates with other Deswik products to facilitate long-term schedule connectivity.

- » 3D animations allow for visual verification of schedule.
- » Ability to handle inclined benches.
- » Simple and easy plotting to communicate the plan to operations.

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## Fast and flexible design capabilities

## Powerful graphics allow for efficient solids modeling

- » Deswik.OPSTS uses a full 3D solids modeling approach to cutting the blocks which ensures accurate volume calculations.
- » Inclined benches are handled with ease. Volumes are accurately reported, resulting in better compliance to plan.
- » Deswik.OPSTS supports multiple methods of creating blocks and deriving the activities from these blocks.
- » Often the location of the drop cut can have a significant effect on the value extracted from a bench. The simple drop cut design allows ramp options to quickly be assessed and compared.
- » Deswik.OPSTS supports all approaches to modeling short-term schedules.
- » Designing and scheduling trim shots can be laborious. Our innovative tool allows you to quickly generate the trim shot with just a few clicks.
- » With the predefined benches already setup, moving between benches is quick and easy.

"Identify higher grade areas to target profitable areas of the bench earlier"

![](_page_4_Picture_0.jpeg)

## Interactive and dynamic scheduling

## Instantly see the impacts of design changes on your schedule

- » Deswik.Sched processes all data on a seconds basis, regardless of the reporting time bins, ensuring that extremely accurate schedules can be created.
- » Deswik.OPSTS' innovative bench configuration allows the skin of material left on a bench after mining, to report to the bench below if it is not mined.
- » New topographies produced by surveyors' during their month-end pickups are updated to schedules, depleting completed blocks, in just one click. This facilitates a rolling plan which is automatically updated.
- » Dynamic updates in Deswik.OPSTS deliver significant business value by streamlining the scheduling process. As you move a cut line, the bench solids are cut, interrogated against the block model and the schedule updated. All resource allocations are honoured, and reports updated.
- » Save time by quickly assigning resources and investigating options with the streamlined process in Deswik.OPSTS.
- » The automatic dependency creation feature removes human error by ensuring that engineers don't accidentally "undermine" benches or mine areas which have not yet been blasted.

"Streamlined scheduling processes deliver significant business value"

![](_page_5_Picture_0.jpeg)

#### Powerful reporting

## 3D animations and schedules provide quick feedback

- » Built to give you unlimited flexibility in terms of the metadata you can generate and pass to the schedule. You can add as much or as little detail as you like, given the reporting and downstream consumption of the outputs. All attributes can be displayed graphically on the screen as labels or tooltips so you can drill into what is in the block with ease.
- » Save time in generating post mining surfaces for downstream processing, such as water modelling and pump forecasting, as well as communicating the plan to operations.
- » As your engineer makes cut changes, the reports and charts in Deswik.Sched are updated with the resultant tonnages, grades, revenues and costs, giving complete visibility to the impact of the change.
- » Access to the formula builder means you can calculate accurate drill and blast factors without the need to do detailed drill and blast designs, providing quick budgetary feedback.

"Produce animations for visual verification of the schedule, to communicate to operations and ensure that results are practical and achievable"

![](_page_6_Picture_0.jpeg)

#### Integrated systems

## Seamless integration of data between Deswik modules

- » Easily import blast polygons from other Deswik files, where they are generated and integrate them with the schedule.
- Support for using pre-defined grade control polygons from geology departments to allocate the destination of the material being mined.
- » Automatically query drill and blast designs created within another Deswik module and update the schedule with drilling meters and explosive quantities to ensure the correct numbers are used every time, removing the risk of manual transcribing errors.
- » Reduce dependency on survey by importing dig polygons at the end of each shift. These will deplete blocks and automatically update the schedule, before the surveyor has completed their pickup. Once the pickup is completed, more volumetrically accurate schedule updates can be performed.
- » Built on the Deswik.CAD platform, providing access to all the advanced plotting and integration features of the core system. This means that paper plans, polygons for fleet management systems, ERP orders etc. can be automatically exported from the system.
- » Integrates easily with Deswk.DO (Dig Optimizer) to make material allocation and optimization based on minimum mining widths a simple process. This allows easily achievable plans with minimal dilution based on the equipment to do the work.

"All data is contained within a single Deswik file, no need to export between the design and scheduling processes"

#### 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.

#### **The Servite 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.

#### **b** 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.

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#### 🔁 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.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.

#### പ<sub>്</sub> Deswik.OPSTS

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

#### X Deswik.GeoTools

Mapping app Perform geological mapping on-the-go.

#### Ca Deswik.MDM

#### Mining Data Management

A spatial database and process workflow management tool.

#### **Deswik Advanced Modules**

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

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