

Quarry Planning Solutions

An integrated platform
for quarry design and
scheduling

Building better quarries

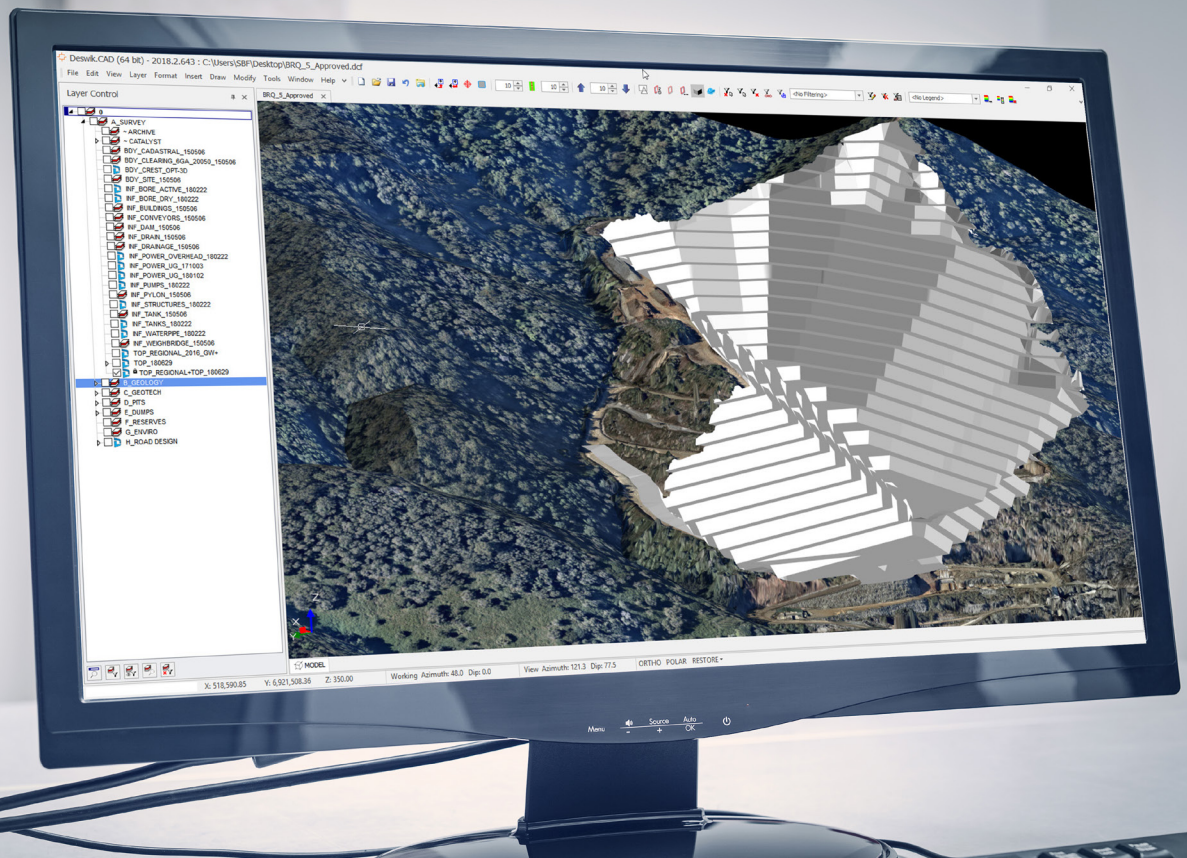
Bringing quarry designs and schedules together

More than ever, quarries need to be well planned. The demands of regulators, owners and community stakeholders have never been higher and quarry management teams need effective tools to make good decisions.

The Deswik suite of software provides the exact tools you need:

- Deswik.CAD to manipulate and manage drone point clouds and create effective quarry designs,
- Deswik. Sched to ensure that the extraction sequence and resourcing of your deposit is understood,
- Deswik.IS to integrate quarry design and schedules, and
- Deswik.LHS to ensure that you understand the haulage and environmental planning required.

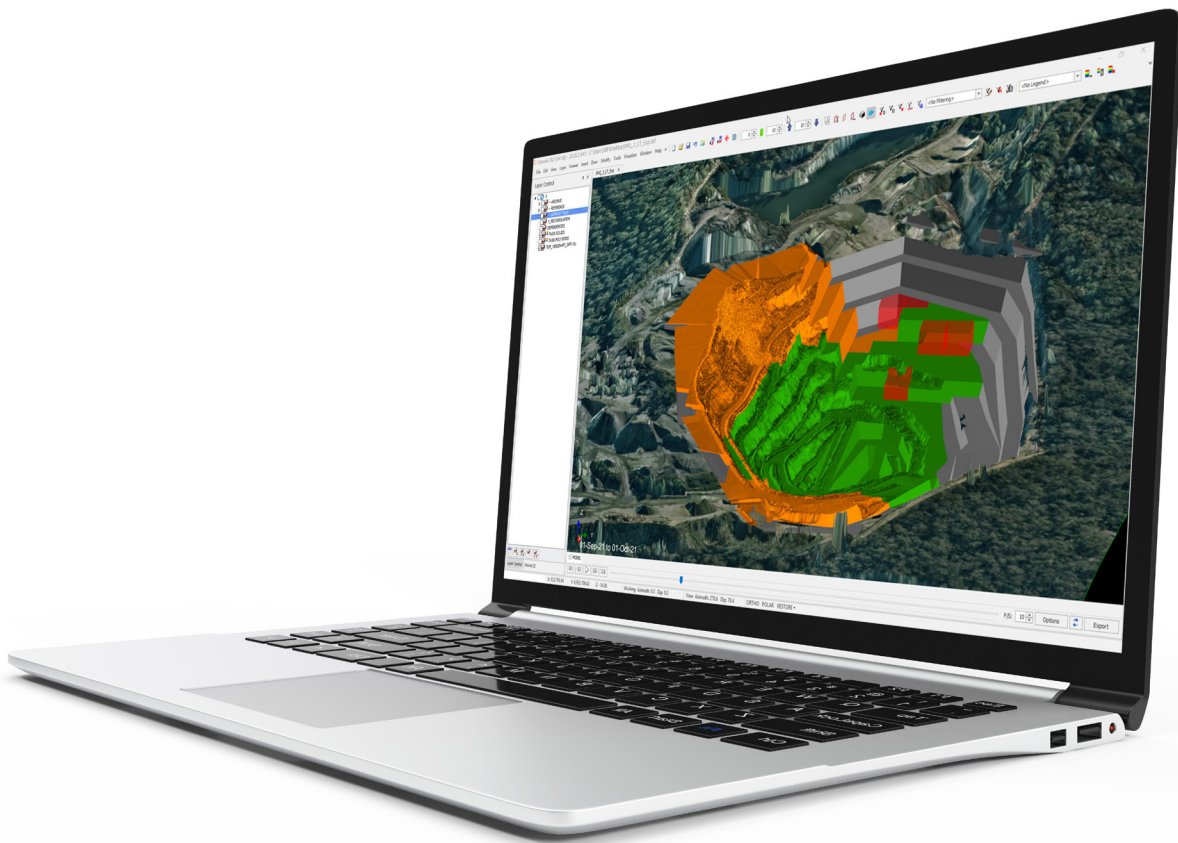
All in one integrated software platform that can read and write common industry file formats.



The next generation of 3D design tools for quarrying

- » Capable of planning any quarry operation.
- » Handle large datasets with excellent graphics performance.
- » Bring GIS-style capabilities to 3D quarry data with superior attribute and metadata handling.
- » Perform superior analysis with complex calculations directly in the design environment rather than in an external spreadsheet.
- » Run advanced design and editing tools within a simple, modern, and intuitive interface.
- » Automated pit design tool that allows for quick editing and changes to designs.
- » Add structure to the planning process using graphical workflows tied into the entire Deswik.CAD toolset.
- » Rapidly and intuitively plot using the WYSIWYG principle.
- » Use custom filters and legend overlays for superior graphical reporting.
- » Integrate easily with most mining and CAD packages.

“Industry-leading
solids modeling
for unprecedented
precision and
visualization”



Deswik.Sched

Scheduling solutions that set us apart

- » 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 Quarry plans in excess of a hundred years.
- » Use a flexible combination of manual scheduling tools for short-term and automated long-term scheduling.
- » Incorporate resource-specific maintenance requirements including maintenance events based on equipment hours and equipment replacement.
- » 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.
- » Copy and paste reports and data directly into Microsoft Excel.

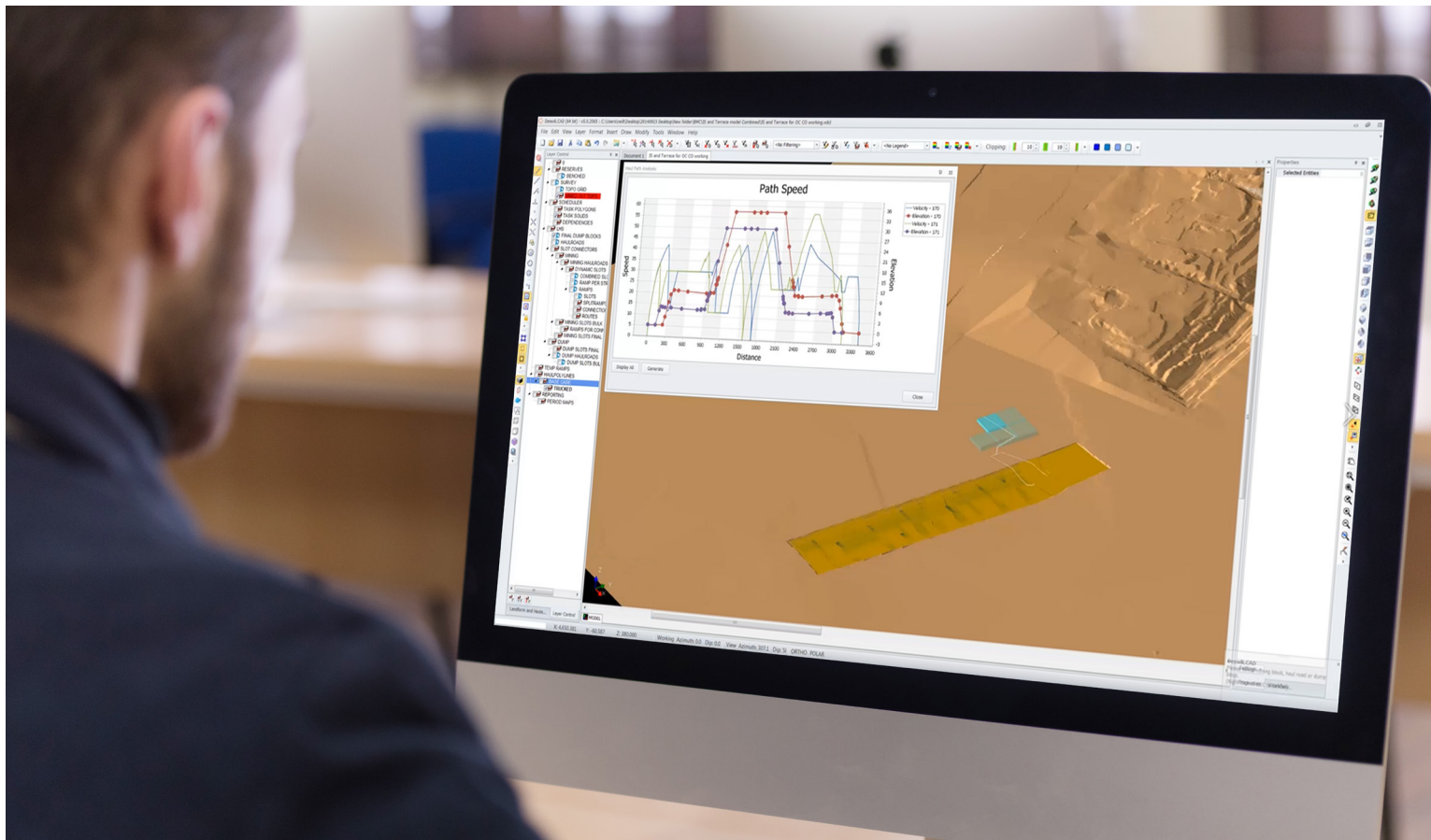
“A dynamic, modern approach to scheduling”



Bridging the gap between scheduling and planning

- » 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.
- » Create 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.
- » Develop derived tasks to represent a task that is involved in the cycle of extracting the main quarrying block e.g. drilling and blasting.
- » 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.
- » Automate updates of existing schedules from surveys, cutting and re-proportioning tasks and rescheduling from the survey date forward.

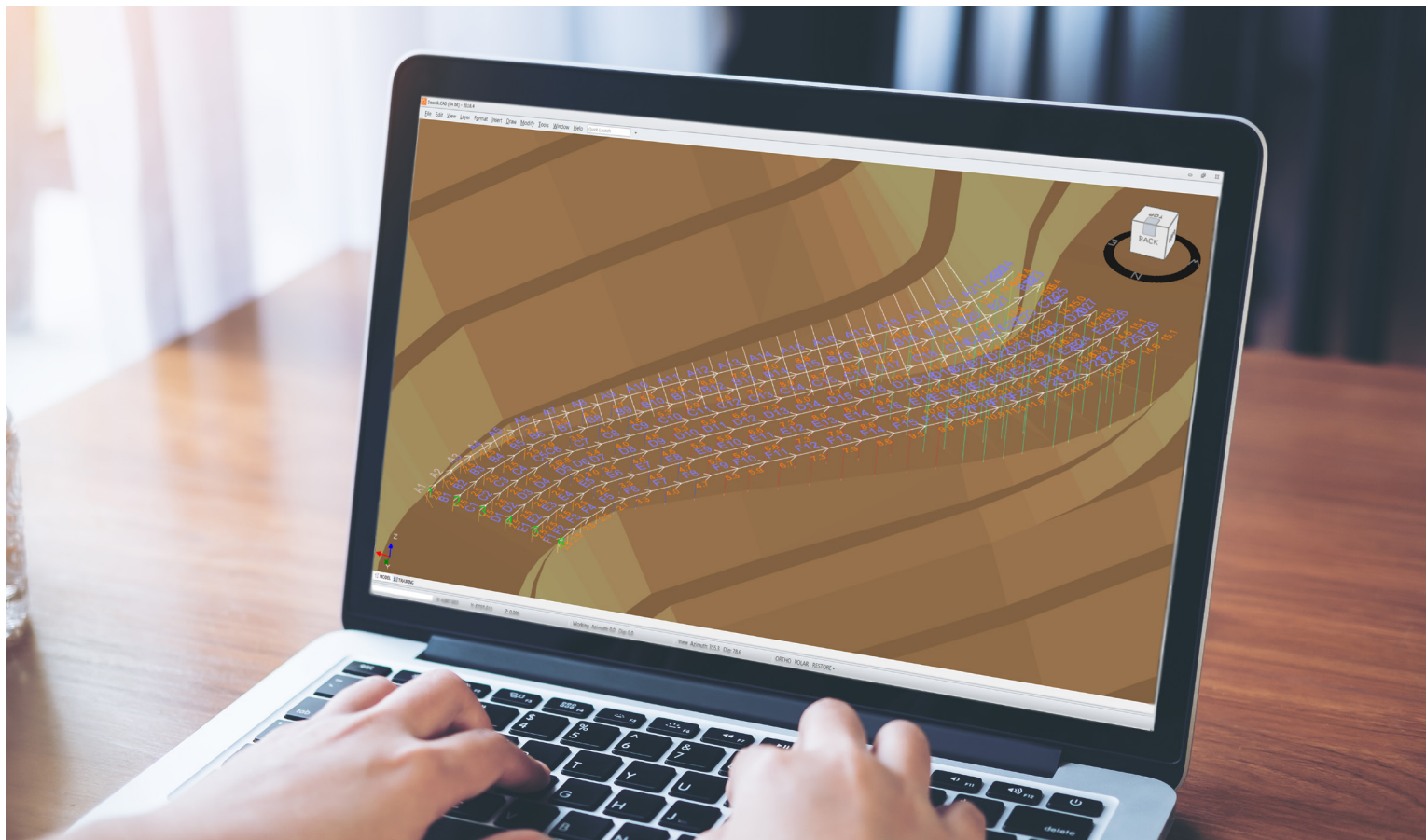
“Seamlessly merges design and scheduling”



Delivering optimized haulage outcomes

- » Produce detailed, meaningful dump schedules from large datasets to accurately model complex material movements and compare dumping strategies.
- » Integrate with production scheduling to maximize opportunities and manage production risk at both tactical and strategic time horizons.
- » Model standard truck haulage or fixed and mobile conveyors.
- » Limit haul roads with congestion, so a different haul path must be found once the congestion limit is reached.
- » Vary performance over time to model seasonal weather variations and reflect actual delay events with release dates for haul roads and dump areas.
- » Rapidly generate mining stage plans and contour plots.
- » Easily carry out water catchment analysis and run-off reporting.
- » Select material placement for sensitive materials including acid mine drainage and tailings.
- » Report fuel and CO₂ emissions.

“Superior material movement, environmental and rehabilitation simulation”



Deswik.OPDB

Fast, efficient drill and blast design

- » Construct hole templates with design parameters such as fixed/variable collar or toe spacing, angle changes and variable toe horizons.
- » Rapidly generate drill patterns using pre-defined hole templates, then manually adjust as required to final design considering previous design and geological structures.
- » Audit drill patterns against blast hole distribution and location constraints.
- » Update hole layouts against survey and design changes with fast and intuitive hole numbering.
- » Export design data ready for direct import into BMI's BlastPlan Pro blast design software.
- » Rapidly setup plot templates with tables referencing key design information that update for each plotted drill design.
- » Export to various data formats and upload the design directly to the drill rig hole navigation systems (such as TIM3D) using the IREDES format.
- » Distribute drill designs and GPS guidance files to surveyors in either DXF or CSV formats.

“Ensures that generating the drill and blast plan is just as easy as communicating the plan”

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 quarrying.

Deswik.AdvSurvey

Advanced Survey

Fast, efficient point cloud handling.

Deswik.OPDB

Open Pit Drill & Blast

Fast, efficient drill and blast design for quarrying methods.

Deswik.Sched

Gantt Chart Scheduling

A powerful Gantt chart scheduler specifically designed to handle the challenges of quarry planning.

Deswik.MDM

Mining Data Management

A spatial database and process workflow management tool.

Deswik.LHS

Landform & Haulage

Understand material movement like never before with scenario-based modeling and analysis.

Deswik.IS

Interactive Scheduler

Bridging the planning gap between designing and scheduling.

Deswik.OPSTS

Open Pit Short-Term Scheduling

Short-range quarry planning and scheduling tool.



Agents to the cement and
aggregates industry:



www.deswik.com



www.cemagg.com