Deswik®
Delivering mining efficiency

Deswik.CAD

Design & Solids Modeling

THE NEXT GENERATION OF 3D DESIGN TOOLS FOR MINING

Industry-leading solids modeling for unprecedented precision and visibility

Deswik.CAD is designed by mining engineers for mining engineers. Effectively a spatial database, Deswik.CAD combines the visual power of a modern CAD engine with the efficient data management of a fully featured database, giving you the ability to display, analyze and report your data as you need to.

Designed to provide generic engineering tools with flexible applications, Deswik.CAD is used and sought after across all mining sectors; underground and open pit mines, both coal and metal, throughout the world.

A Fresh Perspective

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.

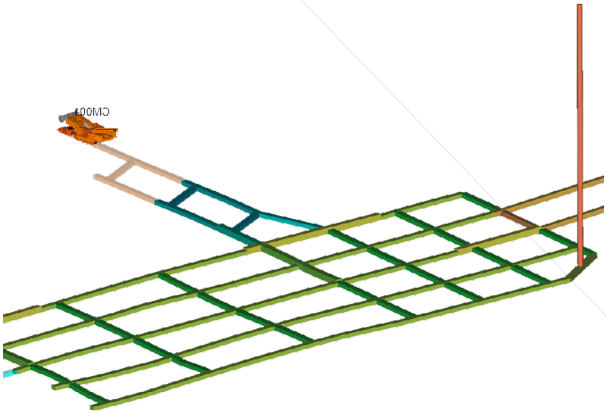
Benefits

Delivering more value through effective mine planning

- Handle large mining datasets with excellent graphics performance.
- Generate solids, slice and run Boolean commands without errors.
- Bring GIS-style capabilities to 3D mining 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.
- Handle all mining sectors, open cut or underground, coal or metals.
- Manipulate information using a powerful formula builder, instead of scripting.
- 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.
- Customize and manipulate data using plugins and scripting.

Fully-featured CAD Engine

Mine design from a different angle

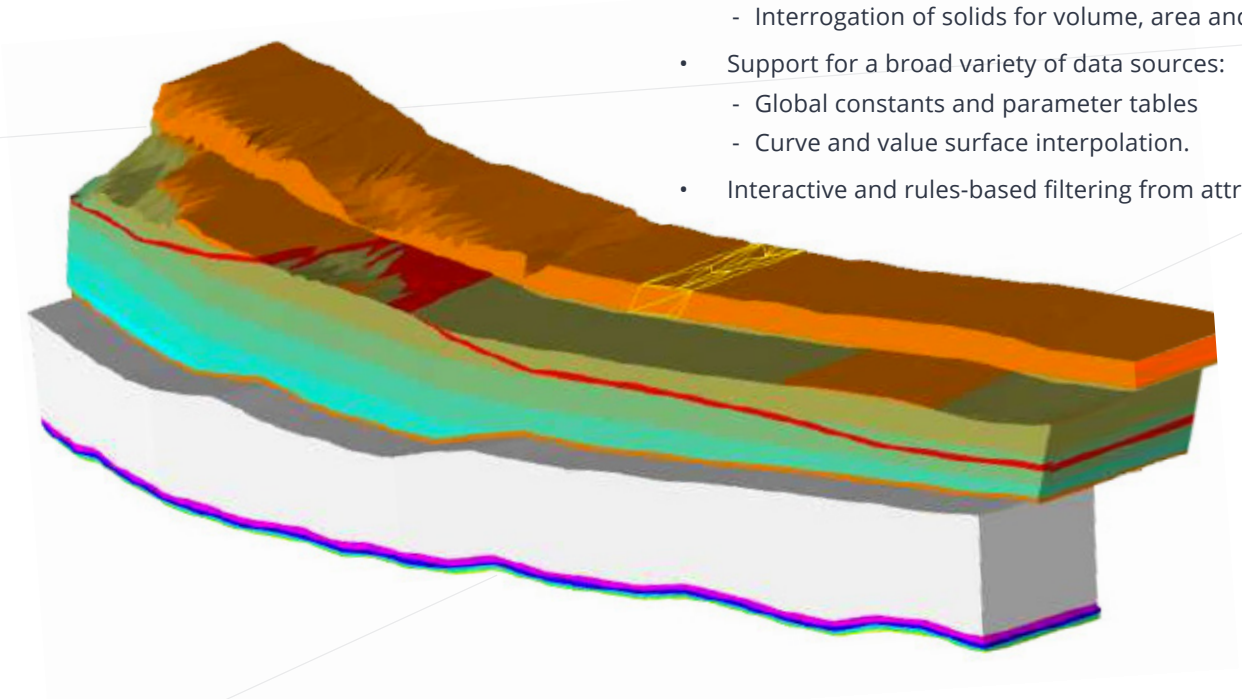


- Support for all standard CAD objects as well as mining-specific objects, such as:
  - Irregular stopes and tunnels
  - Drill holes
  - Gridded seam and block models.
- Superior graphics performance taking advantage of modern graphics card technologies.
- A robust Boolean engine for generating solids and polygons.
- Automatic repair for invalid solids imported from other mining systems.

Integrated Data Management

Superior Data Manipulation and Analysis

- Reporting based on Boolean intersections similar to GIS systems.
- Advanced spreadsheet-style formulas for data calculations:
  - 3D spatial lookup formulas
  - Interrogation of solids for volume, area and intersections.
- Support for a broad variety of data sources:
  - Global constants and parameter tables
  - Curve and value surface interpolation.
- Interactive and rules-based filtering from attribute values.



Open, Integrated and Customizable

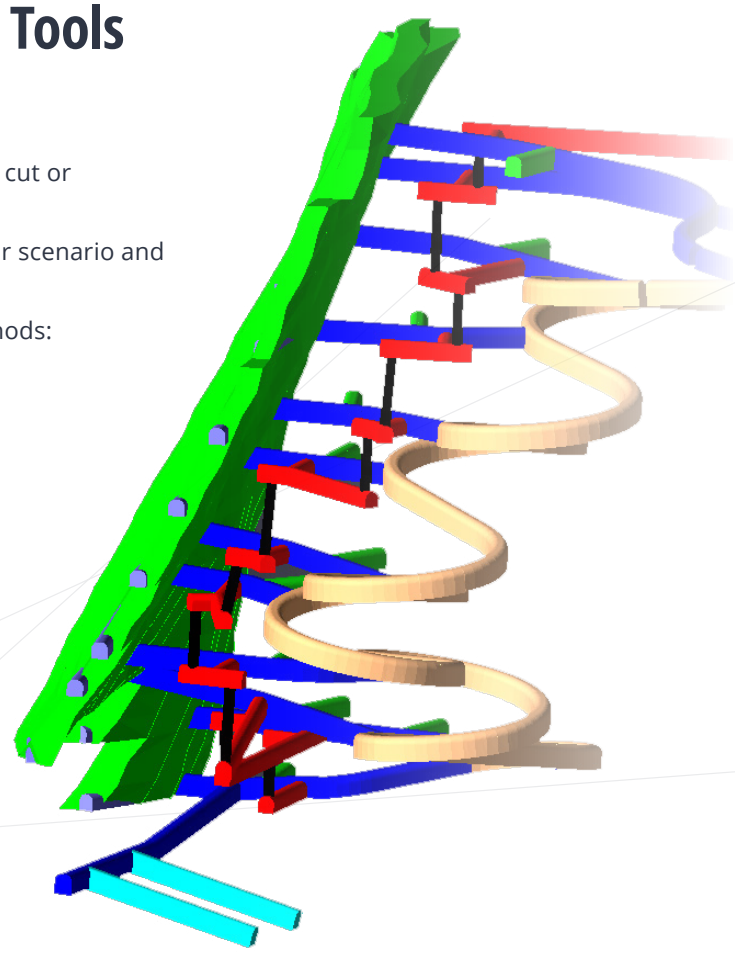
Never script again, unless you want to

- Deswik.CAD easily integrates with most other mining and CAD packages.
- Scripting in an Integrated Development Environment:
  - Plugins can be developed in VB.NET or C# and easily introduced into the application
  - Powerful object model that allows full access to all properties and methods
  - In-built development environment with full access to the entire .NET framework.

Comprehensive Mining Design Tools

Accelerate your design process

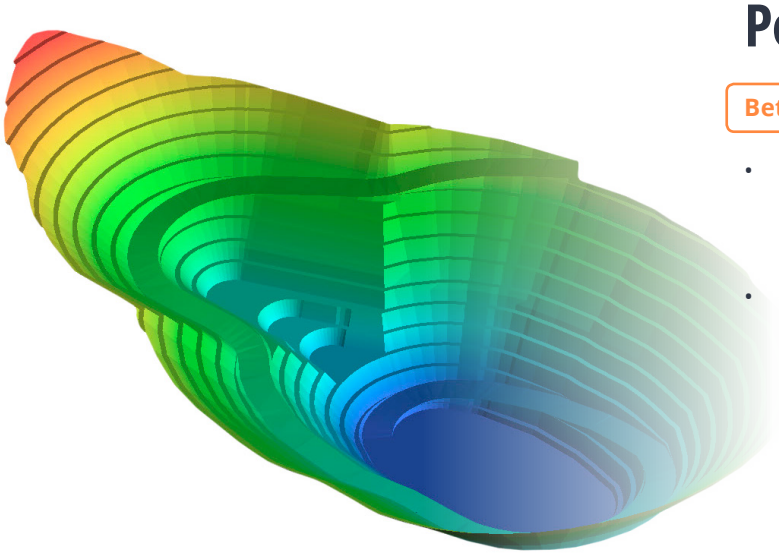
- Universal applications handling all mining sectors, open cut or underground, coal or metals.
- Rules-based mine design engine for designs, allowing for scenario and alternative design analysis.
- Solids and surface generation using a multitude of methods:
  - Projection – strip or pit (open cut reserving)
  - Cross-section along polyline (tunnels)
  - Manual or batch linking (stopes)
  - Tessellation (LIDAR data processing or DTM creation).



Auditability and Consistency

Transparency and reliability in your results

- Wizard and rules-based tools provide data manipulation transparency.
- Customizable workflow macro builder which removes confusion for unfamiliar users:
  - Repeatable design and data transformations
  - Standardized planning process mapped to internal processes.



Powerful Reporting

Better communication for greater understanding

- Flexible data queries generated on demand:
  - Volumes, areas, attributes and properties
  - Data histograms.
- Familiar plotting functionality mirroring most other CAD systems:
  - Unlimited, independent viewports for each plot
  - Title block text with intelligent attributes including date and username
  - Spreadsheet-style table editing, with tables easily placed into 3D space or on plots.

"A powerful design platform with superior data handling"

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

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

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

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

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

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

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

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.FM - File Manager Proactively manage data versioning with an integrated document management system.

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

Deswik®

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