Deswik.Apps

Mobile Decision Support

Enabling operators to make better, faster decisions with digital access to production data

Deswik®

Extending digital solutions into the hands of operational teams

A suite of apps that provides critical mining data to operational teams to drive smarter business decisions

Mine sites often face a digital disconnect in transferring information from the mine planning and technical services teams into the hands of the operators. A combination of paper plans and data-heavy spreadsheets can result in inefficiencies and a lack of communication, which can delay tasks and cause errors.

The simple solution to this problem is to provide operators with all the information that they need to complete their work in a digital and mobile format.

Deswik.Apps is a suite of mobile applications that was created with the operator in mind. The apps enable them to complete their work with a customized view of the information that they need at hand, even while offline. Once operators are back online, the data syncs to a central location, eliminating the need for operators to file paper sheets.

Each of the apps allows for better decision making, increased productivity, seamless transference of information, and a consistent digital record. By providing operators with the tools they need at 'the face', Deswik.Apps helps to reduce errors, rework and the inefficiencies of paper-based operations.

With a Deswik.Apps license, users can download and use any of the applications included in the suite, enabling digital continuity across the site. The suite currently consists of the following apps, with plans to expand them in place:

- Deswik.Survey
- Deswik.Drilling
- Deswik.SmartMap
- Deswik.SmartCut
- Deswik.OPS Operator App

Deswik.Survey
Survey App

An application for recording survey data on the go in underground operations

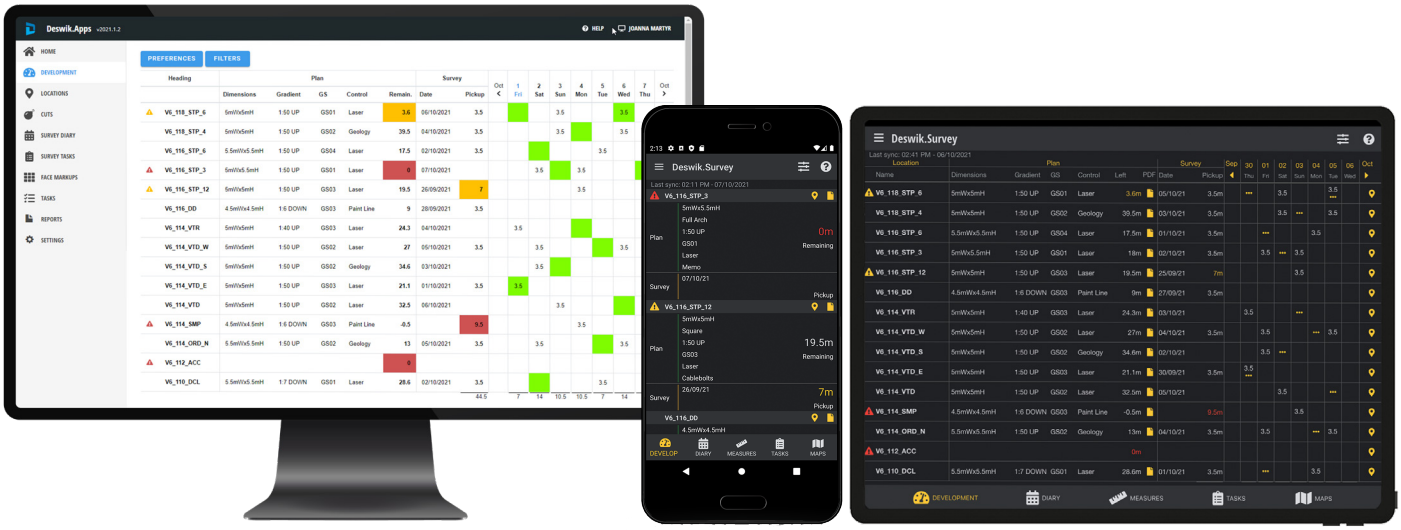
As one simple, smart system, Deswik.Survey provides a complete overview of mining locations and statuses, allowing surveyors to access all the information they need in the field. With Deswik.Survey, surveyors are empowered to work in a way that saves time and is highly efficient, minimizing operational delays.

Mining workforces depend on efficient handovers during which accurate information is easily communicated. Deswik.Survey was developed for teams with a limited handover time and the result is a solution that is quick, easy, and comprehensive. Deswik.Survey operates on both Android or Apple mobiles and tablets, online and offline, with data syncing back to the Web Portal as required.

Development Dashboard

All of the answers, all of the time

The Development Dashboard can be viewed on the mobile, tablet or Web Portal, providing a complete overview of the mine. The dashboard gives surveyors access to all of the answers, all of the time, including access to each heading, the latest survey plan, and a history of surveys and cuts for the past seven days. Headings that need to be surveyed are highlighted based on site-specific rules, enabling a proactive approach to survey.



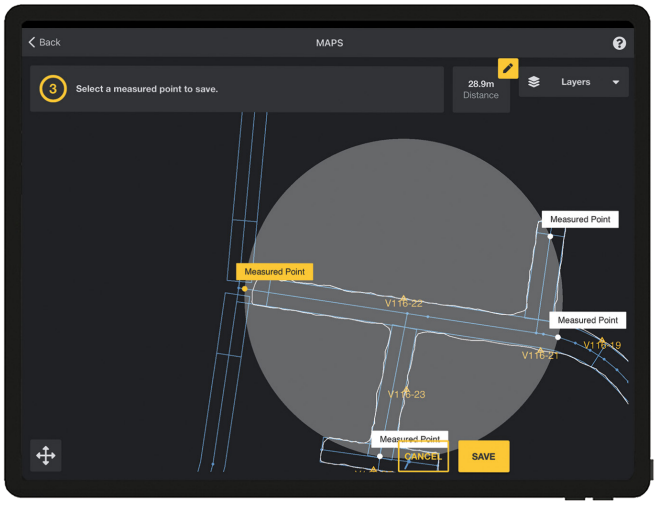
Available on the App Store

GET IT ON Google Play

Interactive Mine Map

Digitize on the go

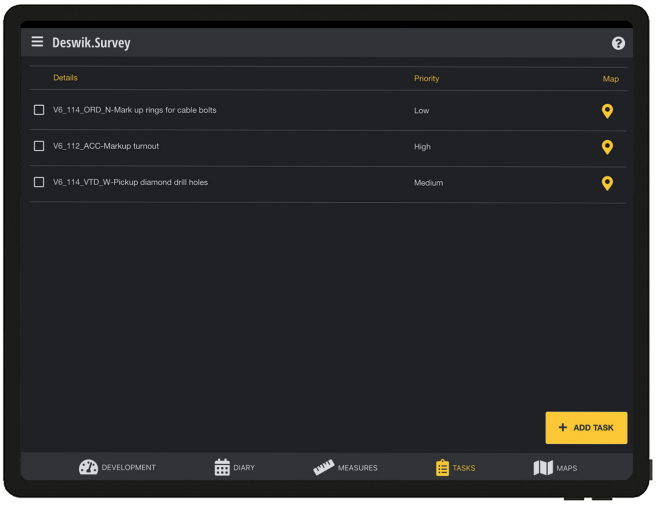
A mobile interactive map of the mine enables surveyors to quickly check point details, including coordinates while on the go. Save time by digitizing directly on the map while in the field, adding services which can then be downloaded into mining software. The move function gives users the flexibility to move asset locations in real time. Whether it is a jumbo box, fan starter, drill bolt, or other asset, they can move the asset location on the map during the shift as soon as the task is completed.



Face Measurement

Easy end-of-month reporting

Save time at end-of-month by automatically digitizing the face advance distance on the interactive mine map and downloading the data when users get back to the surface. The downloaded data will be stored in the Web Portal for reporting.



Survey Tasks

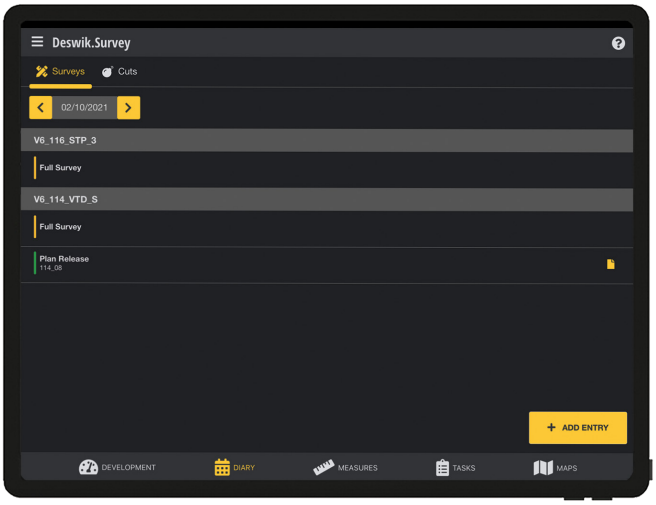
Add survey tasks on the job

Add survey tasks while on the go. Select a location, add a task, assign a priority, record a file name, and add a contact person for the task on the Web Portal. This data syncs from the Web Portal to tablets underground.

Location Details

Information at hand

With Deswik.Survey, the details of each heading are always at hand. Warning dials indicate the meters remaining on the plan and the number of cuts since the last survey. The location calendar shows a comprehensive history of work that has occurred at the heading including cuts, plans, and survey details with surveyor' comments.



Survey Diary

Record and view information on the go

Record surveys, plans, and cuts while on the job. Surveyors can also view this information by date or location in the Survey Diary.

Deswik.Apps Web Portal

Manage Survey Data from a Central Location

The Web Portal allows surveyors to view and manage data using Deswik.Survey. Upload survey plans and cuts to the Web Portal, and this information will then be synced to mobile devices for use underground. Customize mine and map settings within the Web Portal to select the information displayed on the applications.

Surveyors can view the development dashboard, location details, and other critical data in the Web Portal as well as on the mobile applications, allowing them to manage the data from a desktop and underground. Data can then be exported from a desktop or from a mobile device underground.

Available on the App Store

GET IT ON Google Play

Deswik.Drilling
Drilling App

An application that improves efficiency and accuracy in underground development

Mine faster and smarter with quick, simple, and more accurate mark-ups. Deswik.Drilling is a customizable application which provides operators with the latest survey plans, an interactive mine map, face mark-up abilities, and an operator toolbox to guide users through complex mark-ups.

With Deswik.Drilling, there is no need for operators to chase up paper plans before they head underground to do their jobs. Operators will automatically have the current plan on the drill at the face. Deswik.Drilling was designed to save operators' time and reduce rework caused by incorrect mark-ups.

Deswik.Drilling can be used on Android or Apple tablets, operating both online and offline with the ability to sync data back to the Web Portal as required. Functionality can be turned on or off depending on the desired use and data required to complete tasks.

Operator Toolbox

Do it once and do it right

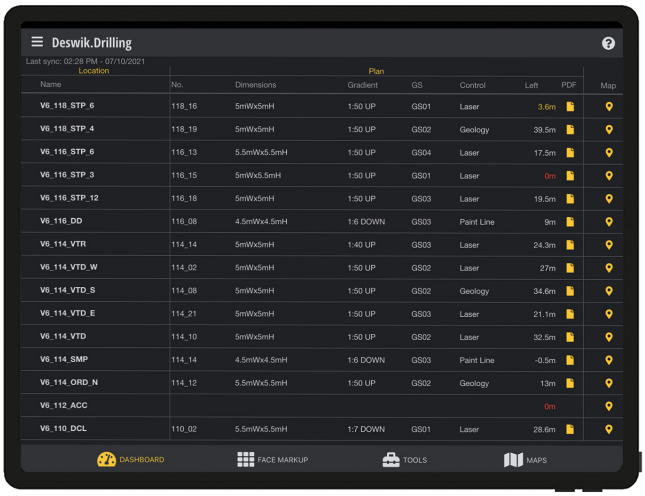
Effective use of operator time is crucial. Deswik.Drilling allows operators to spend less time on complex mark-ups, provides accurate mark-up information, and allows operators to learn best practice, all at the same time.

Mark-up Basics
The basis of every straight cut is a good mark-up. Deswik.Drilling is specifically designed to assist operators to maintain straight cuts and flat faces.

Offset Calculator
Deswik.Drilling allows jumbo operators to enter the face distance and laser offsets, and they are then stepped through the process of marking up the face correctly.

Angled Drives
A common problem when marking up an angled drive is to mark across the face on the first cut. With the toolbox, operators are stepped through the mark-up to ensure that angle drives are done correctly every time.

Fillets
Operators are stepped through the method of marking up and checking the fillets when mining a turn-out.



Dashboard

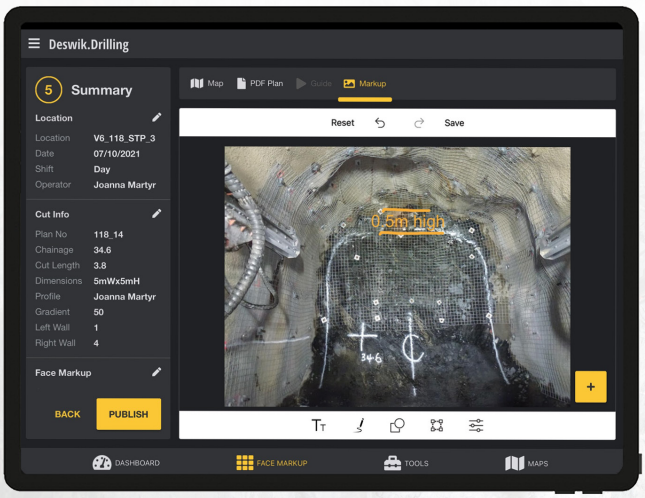
Survey plans at your fingertips

There is no longer the need to chase up survey plans on the surface before heading underground. Deswik.Drilling saves operators time by providing them with all of the current plans for headings within the easy-to-read Dashboard. Simply select the heading and instantly see the current plan in PDF format.

Interactive Mine Map

Information at hand

An interactive map of the mine allows operators to see their work location, view the levels above and below, view survey station locations, and see the design and as-builts for each level. The interactive map also allows for clear communication between teams, for example by providing highlighted locations of services. Layers and locations can be added to the map on the Web Portal so that the information is ready on the tablet for the operator when they go underground.



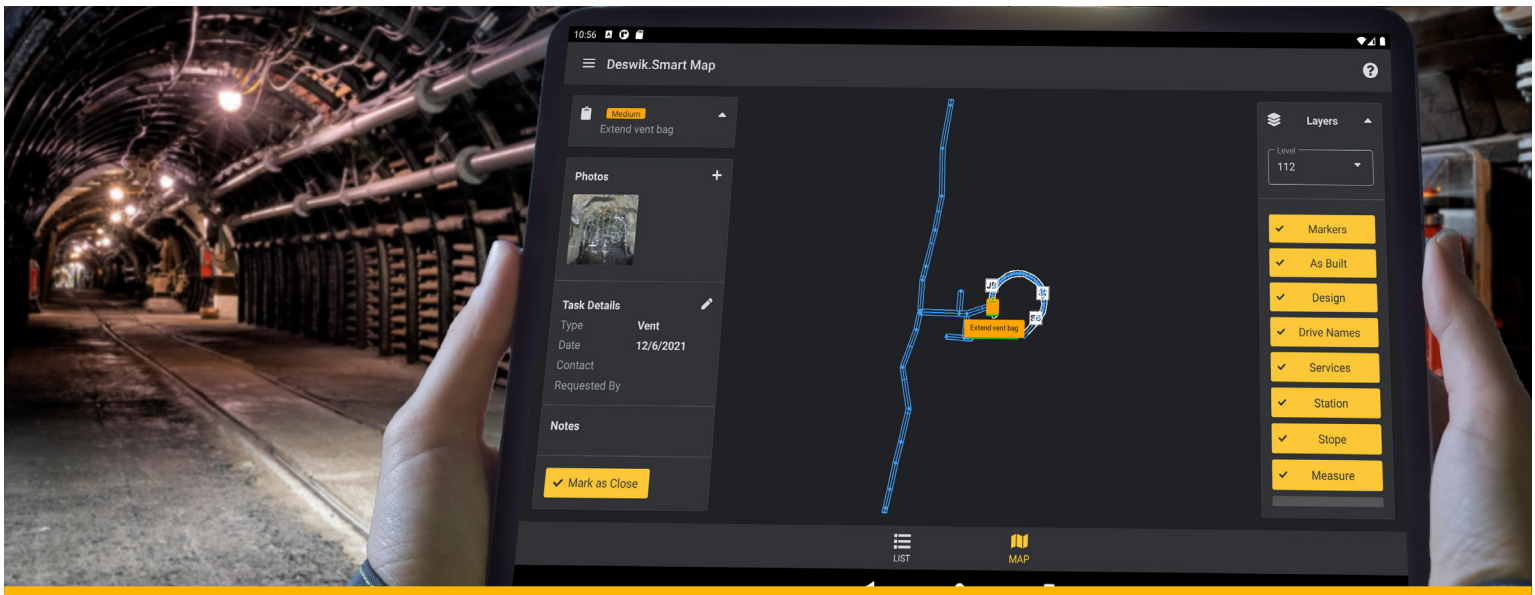
Face Mark-Up

Automatic filing of face mark-up sheets

There is no longer the need to file paper face mark-up sheets. Use Deswik.Drilling to take photos and record data on the job. This data is then automatically filed and readily available to view by heading or date. Operators can annotate directly on the screen and the rest is done for them. All data is synced back to the Web Portal, where it is automatically filed by date and location for use when back at a desktop.

Available on the App Store

GET IT ON Google Play



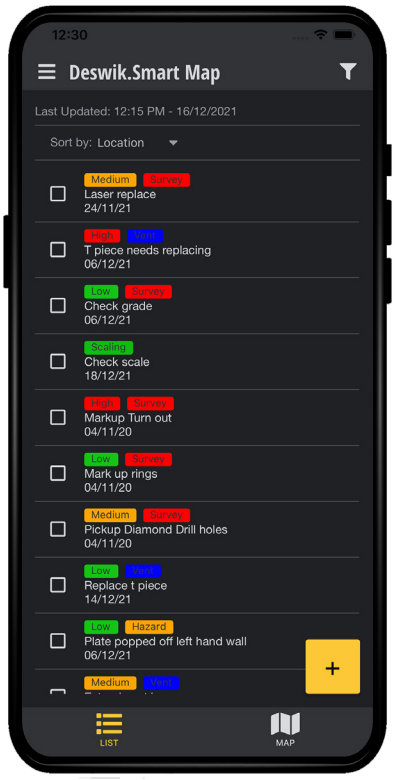
Deswik.SmartMap

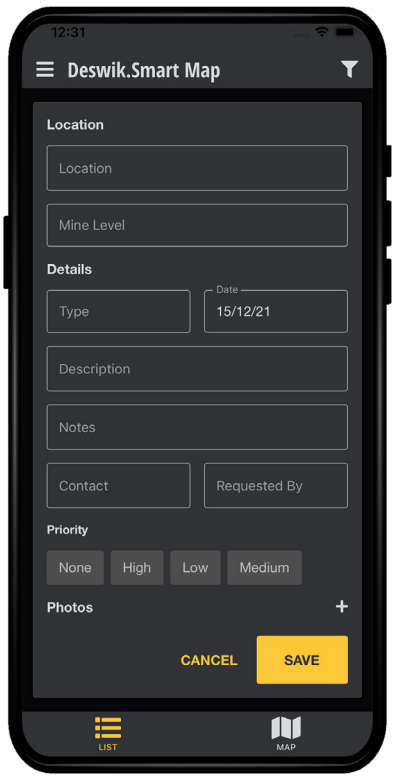
Smart Map App

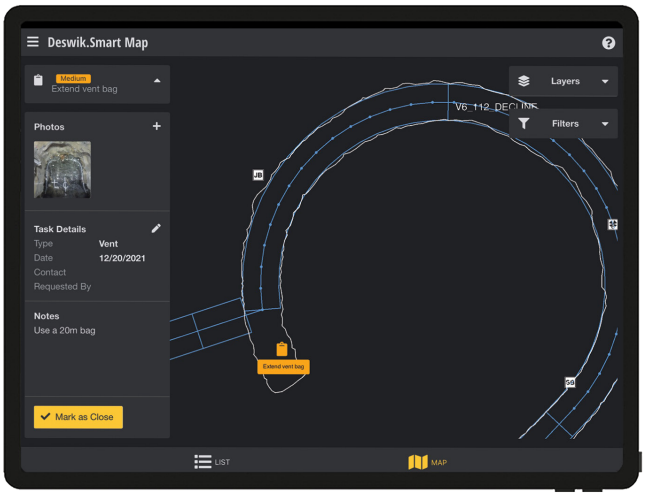
Capture, centralize and track spatial data all at once

The ability to record, store and view data against a location is invaluable, and to have all this information on a mobile device in your hands is a game changer.

Deswik.SmartMap is an interactive mobile map app operable on both Android and Apple devices that allows you to efficiently record and report issues onsite where they occur. Take photos and input customizable map markers on the dashboard or map itself to provide a complete overview of the issue at hand. With both online and offline capabilities, Deswik.SmartMap streamlines the recording process by allowing you to capture data once in the field to sync to a central database online for future tracking, scoping and planning.



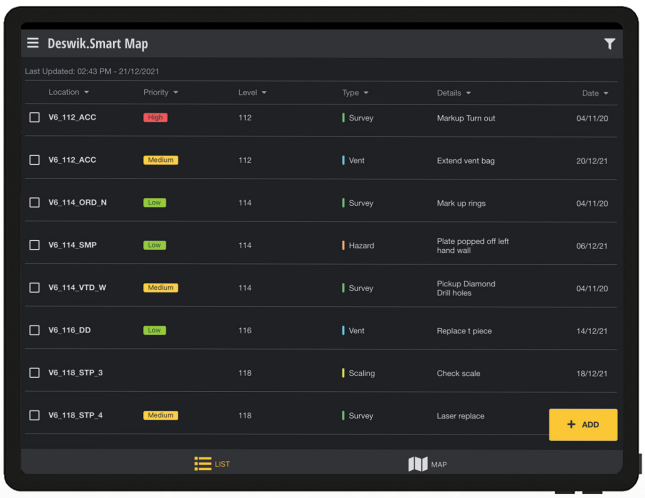




Interactive Mine Map

Record data on the go

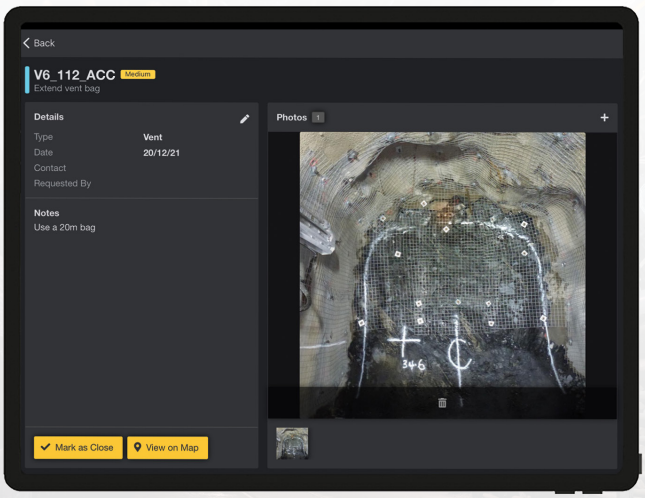
Record and monitor issues on the map for a complete picture allowing you to understand recurring issues and change tactics if needed to make permanent fixes.



Issue Dashboard

Add and view reported issues

Access up-to-date data and make any additions or edits even while underground. All information will sync back up to a central office database.



Issue Information

Track and view statuses

Capture data once in the field for ongoing tracking without the need to re-record. Simply select a location, add a marker, assign a priority and take photos while on the job to provide a clearer picture of the issue at hand.

Available on the App Store

GET IT ON Google Play

Deswik.SmartCut

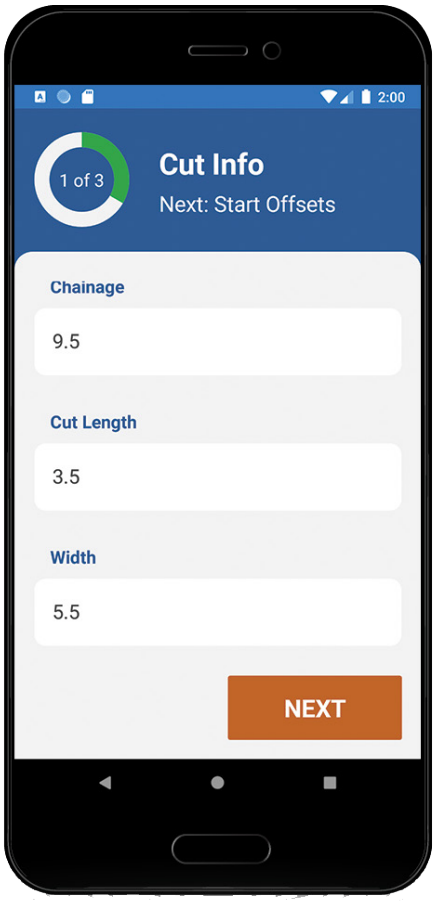
Smart Cut App

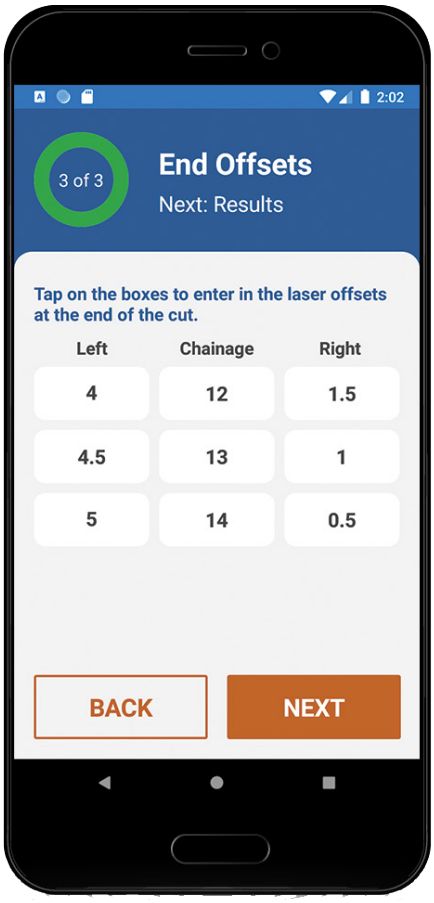
You are only as good as your last cut. Don’t take short cuts. Use Smart Cut.

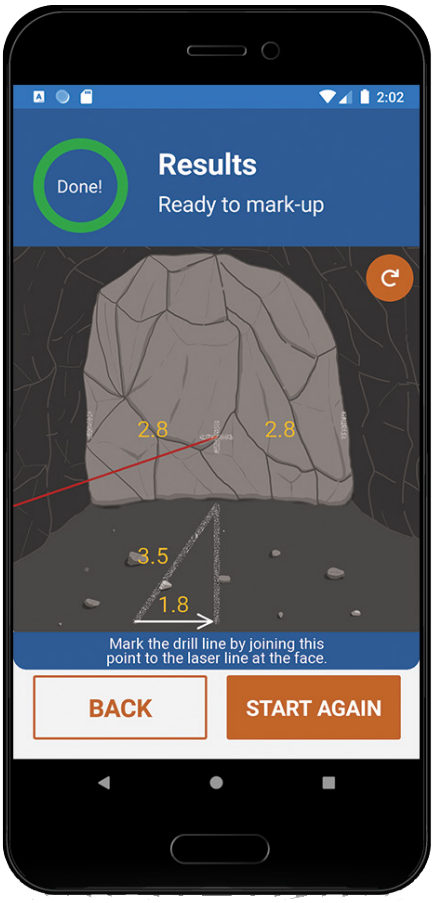
You are only as good as your last cut. You can be a guru one day, and owe cartons the next. Because time is money for jumbo operators, working fast and staying online is good for your credentials.

Deswik.SmartCut is a mobile application for underground jumbo operators. It is an offset calculator which makes mark-ups simple for laser offsets. Enter the chainage and offsets in the app and let Deswik.SmartCut take care of the rest.

Save time. Stay online. Remove the guesswork. No more manual calculation for offsets.







Available on the App Store

GET IT ON Google Play

Deswik.OPS Operator App

Tablet-based work management and Short Interval Control app

View tasks allocated directly from the shift schedule and record task progress for work on and off equipment, rather than just doing primary fleet management

The Deswik.OPS Operator App extends Deswik.OPS beyond the control room to field operations. The planned shift activities are made available on modern tablet devices, allowing operators to efficiently provide feedback on their work tasks directly through the app, in real-time. This replaces paper- and radio-based approaches, which generally result in the double handling of data and data capture errors. Notes, documents, and interactive mine maps in the app provide context for the work to be performed.

The Operator App provides a mobile interface and streamlined mechanism for receiving planned work, capturing progress, and performing dynamic re-planning. When the app is online, the continuous communication between operators and the control room allows for more efficient short-term scheduling and operations management, enabling a SIC work management approach. When offline, all activity information is still available to the operator and they can continue to capture production data for later syncing.

This integrated solution can be implemented across entire operational teams, following a simplified and cost-effective process. It can be used as a stand-alone work management tool for smaller operations, or as a complementary app for larger operations already using Fleet Management Systems (FMS) for managing field activities.

My Tasks

Shift Plan Lineout

Notes, Documents, Maps

Capture Activity Progress, Consumables

Tablet-Based System Functions Online and Offline

Available on the App Store

GET IT ON Google Play

Our industry-leading software solutions include:

Spatial Solution

Design & Solids Modeling

A powerful CAD platform with superior data handling, survey, and geospatial analysis capabilities.

Deswik.SO

Stope Optimizer

Underground stope shape optimization using the latest version of industry leading SSO.

Deswik.Caving

Cave Flow Modeling

Modeling or rock flow within the cave Life-Of-Mine to give recovery and dilution forecasts.

Deswik.UGDB

Underground Drill & Blast

Fast, efficient drill and blast design for underground mining methods.

Deswik.OPDB

Open Pit Drill & Blast

Fast, efficient drill and blast design for surface mining methods.

Deswik.SPD

Strategic Pit Design

Transform optimized pit shells into final pit designs.

Deswik.GeoTools

Operational Geology

A set of tools for geological mapping, sampling, drillhole optimization and ore control.

Planning Solution

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.OPS

Operations Planning and Control

Collaborative short-term planning and shift execution tool for monitoring and managing compliance to plan.

Deswik.LHS

Landform & Haulage

Understand material movement with scenario-based modeling and analysis.

Deswik.GO

Global Optimization

Maximize value by simultaneously optimizing decisions across the mining value chain.

Deswik.MDM

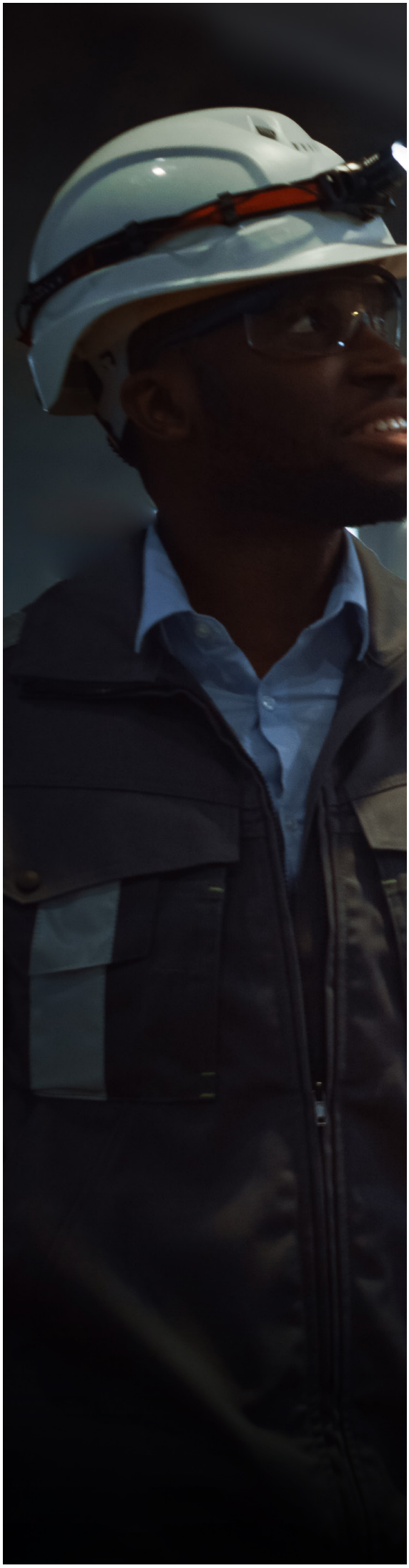
Mining Data Management

A spatial database and process workflow management tool.

Industrial Mathematics

Mining Optimization Tools

Mathematical optimization software, simulation and advanced data analytics.



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