Product brochure



# **HxGN MinePlan Products**





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# **HxGN MinePlan 3D**



#### **Overview**

HxGN MinePlan 3D is the foundational software for visualization, design, modeling, and reserves calculation in our general mine planning portfolio. It is the foundation of a general mine planning package proven by thousands of users in hundreds of mines around the world for more than 50 years. Central to such a strong community of users is 24/7 support, provided in numerous languages by mine planning professionals in 20+ offices around the world. A tailor-made graphics solution for mine CAD design, it uses virtual reality and incorporates all standard presentation techniques. MinePlan 3D's powerful and rapid Boolean engines process data quickly and point cloud visualization is achieved within the same application.

#### **Features and Benefits**

- The only 3D modeling, data visualization and planning software supporting adaptable workflows from exploration to production for all open pit and underground commodities
- Supports seamless workflows for drillhole management, geology modeling, block modeling, 3D CAD, mine design, optimization, long-term planning, short-term scheduling, drill & blast, and ore control
- Easily visualizes large amounts of 2D and 3D data with multiple views
- Single integrated platform means no data transfer between planning products
- Interoperable with other Hexagon technologies and solutions
- Proven as part of a well-established general mine planning package used in hundreds of mines all over the world
- Uses standardized and consistent workflows and reporting functionality to streamline communication between various departments in a mining operation
- Quickly and easily visualizes modern survey techniques involving point clouds

#### **Value Statement**

HxGN MinePlan 3D is the most comprehensive and best supported life-of-mine solution on the market, covering all aspects of the mining process for both open pit and underground operations. MinePlan 3D supports workflows for mine planning, operations, geology, and mine management, answering the needs of anyone who must visualize, analyze, monitor or evaluate mine information.



# HxGN MinePlan GeoSlate



#### **Overview**

HxGN MinePlan GeoSlate is a mobile geological logging application for drillhole data collection. Field drillhole data is collected on a tablet device using the GeoSlate app and our preconfigured logging templates. Data can be instantly published over Wi-Fi using our microservice technology, syncing directly to connected MinePlan 3D drillhole databases for subsequent geologic analysis and workflow execution at the click of a button.

### **Features and Benefits**

- Intuitive, workflow-centric field logging interface is optimized for rugged Android tablet devices for the highest quality user experience
- Prepopulated templates and customizable field codes simplify field preparation
- Supports collection of data including geological, mineralogical, rock mass, geotechnical, defect, point load, water, samples, and more, to serve all data collection needs
- Real-time data validation controls quality and consistency between field personnel, and saves time
- Microservice syncing technology enables data to be instantly published to the Data Service over Wi-Fi, syncing directly to connected MinePlan drillhole databases, where it can be used in all downstream geo workflows
- Syncing minimizes time spent importing/exporting, collating, transmitting, and performing QA/QC on data
- Data Service tracks published logging updates, and provides robust and secure data management with multi-user syncing
  Offline data capture on the logging app means data can be collected anywhere
- Automatic notifications in MinePlan 3D Drillhole Manager when new field data is available means instant access to data, with tracking of what data has been synced so that users can verify that their datasets are up to date
- Syncing interface in Drillhole Manager allows for flexible field mapping and easy access to the field data that MinePlan 3D users need

### **Value Statement**

HxGN MinePlan GeoSlate minimizes time to data by simplifying the field data collection process and integrating directly into MinePlan 3D. The field logging app was built for the field geologist workflow, with intuitive logging templates designed to save time. GeoSlate enables the complete geology workflow within MinePlan, from the early stages of exploration planning and field data collection all the way through geomodelling and resource estimation.



# HxGN MinePlan Drillhole Manager & QAQC



#### **Overview**

HxGN MinePlan Drillhole Manager (formerly Torque) comprises a centralized database platform for securely managing drillhole, blasthole, sample, and any other data, with built-in functionality for data processing and QAQC. Drillhole Manager provides the foundation for Geology workflows within MinePlan, and dynamically integrates with many tools throughout the platform for 3D visualization, statistics, modeling, interpolation, and more.

### **Features and Benefits**

- Securely stores all drillhole, blasthole, sample, and any other data
- SQL databases offer unlimited storage, with option to use SQL Express for datasets of up to 10GB
- Includes built-in functionality for compositing, coding, spearing, filtering, attributing, and validating data
- Dynamically integrates with other tools in MinePlan for 3D visualization, statistics, modeling, interpolation, executing workflows, and more.
- Import information directly from SQL Databases, Acquire, ASCII files and any database through ODBC
- Fully integrated bench and fixed-length compositing tool
- QAQC module for managing and validating samples throughout the laboratory testing process, including certificate management, charting, statistics, summary reporting, support of third-party formats including LIMS.
- Image viewer for storing and interactively viewing core photos, dynamically integrated with the database and with the 3D Viewer
- Tool for interactively correlating between drillholes in section view
- Stereonet tool for structural analysis
- Data integrity and syncing in multi-user environment
- Configurable user permissions and access levels

#### **Value Statement**

HxGN MinePlan Drillhole Manager is a robust data management platform that you can count on for data storage and security. It provides the foundation for data processing, validation, QAQC, and interpretation, with dynamic integrations with other tools within MinePlan enabling seamless execution of geology workflows.



# HxGN MinePlan GeoLogic



#### **Overview**

HxGN MinePlan GeoLogic leverages the power of implicit modeling by sequencing surfaces and solids to create an airtight geological model. The outcome is an entirely reproducible, auditable geological model that can be quickly updated with new information. Fully integrated with the MinePlan planning suite, GeoLogic provides geologists with smart, time-saving modeling.

### **Features and Benefits**

- Creates airtight, reproducible, and auditable geological models ready to code the block model
- Offers geological relationship approach to modeling with intuitive workflows
- Supports source data from the Drillhole Manager or 3D point data
- Leverages a rapid Radial Basis Function algorithm, and a Potential Field algorithm for surface orientation
- Handles faults and complex geology including branching vein type deposits, stratigraphic layered deposits, weathering, unconformities, and more
- Features a smart vein-set creation and strata-layer stacking methodology
- Offers true thickness calculations and true thickness interpolation
- Integrated with MinePlan Drillhole Manager for seamless updates from new drillhole information
- Integrated with MinePlan 3D allowing for dynamic visualization
- Allows for case management scenarios and offers full user control
- Supports grade shells

### **Value Statement**

HxGN MinePlan GeoLogic saves time by allowing geologists to explore multiple interpretative scenarios, and build complex shapes directly from drillholes, rapidly and accurately. It is built with a modeling geologist workflow in mind, allowing you to build a timeline of geological events to produce a series of interconnected MinePlan solids and surfaces, ready to code your block model.



# **HxGN MinePlan Basis Modeling**



#### **Overview**

HxGN MinePlan Basis Modeling comprises programs for building, managing, coding, calculating, analyzing, and basic interpolating of 3D block, stratigraphic, and gridded surface models. The Model Manager is a centralized tool for managing models and defining fields. The Model Calculation Tool supports highly customizable user calculations using built-in QuickCalc and Python scripting. A comprehensive array of other tools and functions are available to meet your modeling needs.

MinePlan Basis Modeling includes the Logic workflow tool for building, managing, and executing customized timesaving workflows. The tool comprises functionality from across the MinePlan Portfolio including advanced model and drillhole functionality, providing users with the flexibility needed to execute customized workflows to generate models.

### **Features and Benefits**

- Supports 3D block, stratigraphic, and gridded-surface model files
- Create sub-blocked models
- Create, edit, report model files, store and extract values
- User calculations using built-in QuickCalc and Python scripting
- Back estimation
- DTM operations, contouring, and partials between surfaces
- Statistical and geostatistical analysis tools
- Limited selection of interpolation methods including inverse distance and more (refer to Basis Geostats for comprehensive interpolation functionality)
- Build customized time-saving workflows supporting functionality across the MinePlan portfolio
- Powerful model visualization and querying capabilities in the 3D Viewer

### **Value Statement**

HxGN MinePlan Basis Modeling provides all the tools needed to give MinePlan users full control over their block models, from model management and customizable calculation to powerful visualization and querying in 3D. The Logic workflow tool enables users and teams to establish robust processes and generate reproducible results while saving time.





# **HxGN MinePlan Basis Geostats**

#### **Overview**

HxGN MinePlan Basis Geostats comprises geostatistical routines and tools for interpolation and simulation of model values. From kriging through to uniform conditioning, a wide set of advanced interpolation methods are available in an intuitive and easy-to-use interface. Algorithms feature advanced customization capabilities, including support for folded deposits using the Relative Surface Interpolator and Dynamic Unfolding tools.

### **Features and Benefits**

- Offers advanced model interpolation capabilities using a comprehensive set of interpolation methods, including standard methods such as inverse distance, several methods of kriging and indicator kriging, and many more
- Interpolate gridded surfaces, stratigraphic models, or 3D block models
- Includes model simulation using multiple conditional simulation methods, with statistical post-processing algorithms
- Integrated with MinePlan Sigma geostatistics tool for reading variogram parameters
- Visualize search ellipse and variogram in the 3D Viewer
- Allows for advanced customization for interpolation such as filtering, selection, geologic rules, outlier handling, and many other controls
- Includes uniform conditioning
- Contour points for trend analysis
- Dynamic Unfolding Tool allows for modeling and interpolating folded deposits, and can be used with interpolation methods
- Relative Surface Interpolator generates new isosurfaces from existing surface(s), which is useful in unfolding

### **Value Statement**

HxGN MinePlan Basis Geostats provides geologists with the routines and tools needed to suit their geologic interpolation and simulation needs. The tools are intuitive and easy to use, while the comprehensive functionality provides advanced users with the methods and flexibility they need to generate complex models.



# **HxGN MinePlan Sigma**



#### Overview

HxGN MinePlan Sigma offers a comprehensive package of statistical and geostatistical programs to analyze and evaluate drillhole, blasthole, and model data. MinePlan Sigma includes time-saving workflow features and assists the resource geologist and other mining professionals in building a block model. It's fully integrated with MinePlan Drillhole Manager (formerly Torque), MinePlan 3D, and other common formats to produce sophisticated and customizable reports, charts, and graphs.

### **Features and Benefits**

- A statistical application for univariate, bivariate, and spatial analysis of geological data
- Support for multiple concurrent data sources, including block models, MinePlan Drillhole Manager, MinePlan Basis and text files
- Block model support includes 3D block models, gridded seam models, gridded surfaces, multi-ore precent models, and sub-blocked models
- Many univariate and bivariate statistical methods and chart types
- Complex geostatistical methods, including declustering, contact plots, and advanced variography functionality, including several variogram plot and model types, 3D variogram maps, auto-fitting, and integrated dynamic unfolding
- Integrated with MinePlan 3D for selection and visualization of drillhole and block model data
- Modern and intuitive user interface for batch creation, viewing and editing of graphs
- Provides a smart approach to statistics through initial parameters and workflow guidance
- Customized report generation, plotting, and exporting functionality

### **Value Statement**

HxGN MinePlan Sigma empowers you to perform all your statistical and geostatistical analysis through advanced univariate, bivariate, and spatial charting options in an intuitive and easy-to-use interface. MinePlan Sigma gives you the flexibility to work with a vast array of data sources and formats and provides powerful visualization interpretation capabilities through dynamic integrations with the 3D Viewer and Drillhole Manager.



# **HxGN MinePlan Project Evaluator**



### Overview

HxGN MinePlan Project Evaluator (MPPE) is a drag/drop canvas and scenario approach for open pit strategic feasibility and life-of-mine (LOM) planning. Determine optimal pit limits using Lerch-Grossmann and pseudoflow algorithms. Run price sensitivity, cost analysis and define the economic model. Use variables and calculations to aid scenario batching. Establish phase designs and overall mining direction. Vary phase sequences, production targets, stockpiling strategies and advancement rate scenarios to understand and improve project NPV. Build scenario trees for project organization and auditing. Use pivot reporting and MinePlan 3D viewer integration to analyze and compare results.

### **Features and Benefits**

- Generate the most optimal pit limits Use industry standard 3D Lerchs Grossmann and pseudoflow algorithms to determine optimal pit limits and establish a reserve
- Batch pit runs quickly and easily Use variables to quickly run sensitivity analysis.
- Build and evaluate the best mining direction Create phases that focus on size and value. Vary pit sequences and schedule to evaluate feasibility
- Improve project NVP Run best/worst case schedules or optimize schedule using MinePlan Schedule Optimizer bestin-class mixed integer linear programming
- Organize optimization scenarios and results Use the drag and drop canvas to build economic, pit and scheduling hierarchies.
- Viewer interaction Check pit slopes and phase practicality with MinePlan 3D viewer integration as well as audit and report each step/case in the scheduling process.

### **Value Statement**

HxGN MinePlan Project Evaluator is unique in the strategic scheduling space, utilizing a modern interface and performing all necessary functions for your long-term planning workflow. From optimizing the ultimate pit to creating pit-by-pit graphs which can help identify the ideal ultimate pit. The optimal scheduling tool puts Project Evaluator a step ahead by bringing the MILP optimization technology that has made MinePlan Schedule Optimizer the industry standard into the strategic scheduling space for the first time.



# **HxGN MinePlan Stope Optimizer**



#### **Overview**

HxGN MinePlan Stope Optimizer is a strategic mine planning tool for underground. It automates the design of stope shapes for a range of stoping methods. Using constraints and design parameters, Stope Optimizer provides the optimal stope shape design to maximize the value of an orebody. The outputs (stope wireframes, coded block model, and reports) are suitable for use in strategic and tactical planning.

### **Features and Benefits**

- Identifies both economic and sub-economic stope shapes
- Works with sub-blocked and non-sub-blocked models
- Supports irregular stope frameworks
- Uses surfaces for controlling and restricting stope creation
- Uses industry standard algorithm
- Allows for complex stope shapes
- Integrated with MinePlan 3D
- Allows for detailed constraint and optimization options

### **Value Statement**

HxGN MinePlan Stope Optimizer enables you to calculate the economic value of each block while identifying both economic and sub-economic stope shapes. Store stope shapes back to the model for further analysis and scheduling and use detailed constraints and optimization options. Use surfaces to restrict stope creation. Integration with the MinePlan portfolio allows the visualization of results, while Advanced Reporting and Charting allows you to check the stopes and compare schedules.



# **HxGN MinePlan Reserves**



#### **Overview**

HxGN MinePlan Reserves is a tool for resource estimation and reserves reporting. Quickly create charts, graphs, and reports, with powerful and flexible options to suit the needs of any deposit type.

### **Features and Benefits**

- Robust, reliable and industry proven resource estimation
- Estimate from 3D block models and stratigraphic models, including sub-blocked models
- Report reserves on geometry or surface cuts from solids, polygons, or gridded surfaces in the 3D Viewer
- Calculated fields with customizable expressions
- Accumulate reserves by bench or by cutoff
- Control the order of mining with selective mining, priority values, HW/FW options
- Quick and simple creation of charts, graphs, and reports in multiple formats
- Save and reuse reserve logic and reporting templates
- Integrated with planning products including MinePlan Schedule Optimizer, Activity Scheduler, Planner, as well as third-party applications

### **Value Statement**

Estimate your resource and generate reserves reports for any deposit type with the robust and industry-proven HxGN MinePlan Reserves application. Save time and optimize your mine schedules using integrations with MinePlan planning and scheduling products.



# HxGN MinePlan 3D – Pit Expansion Tool



#### **Overview**

Computer-aided design (CAD) is critical to any mining project. HxGN MinePlan 3D (MP3D) offers variety of interactive tools to aid the design process of the most complex operations. The MinePlan 3D Pit Expansion Tool, is one such example. It generates full pit outlines from a pit bottom or top. It expands upward and out or downward and in. It also automatically designs structures, such as dumps, by expanding upward and in or down and out. The Pit Expansion Tool provides a host of options for both the beginner and the advanced user to quickly achieve pit designs. This allows several designs to be generated for evaluation in far less time during the planning stages of a mine. These designs can then be assessed for their relative merits and a decision can be made on which will be built.

### **Features and Benefits**

- Quickly and easily creates pit, dump, dyke, and spoil designs
- Creates pit shells, merged pit surfaces and pit solids
- Flexible pit expansion scenarios; upwards or downwards, inward, or outward
- Ability to create simple face and pit slopes
- Complex face slopes, pit slopes, and berms defined by wall azimuth or model code
- Incorporated switch back design functionality
- Ability to create ramp centerlines
- Integration with block model and reserves

### **Value Statement**

The HxGN MinePlan 3D Pit Expansion Tool is a powerful detail-oriented solution featuring advanced CAD functionalities to assist with the most intricate tasks, enabling quick and confident production of pit and dump designs.



# **HxGN MinePlan Schedule Optimizer**



### Overview

HxGN MinePlan Schedule Optimizer is the market leader in strategic scheduling and optimization. Create optimal planning scenarios based on site specific objectives. Set destination targets, limit haul truck hours, and constrain advancement. Apply cut and destination sequences for plan practicality. Set phase precedence to ensure mining direction. Manage haul networks and update profiles dynamically based on mined material. Define economics, outline cost and apply discounting to build detailed cashflows. Run multiperiod schedules to eliminate production volatility and maximize NPV with the power of CPLEX. Communicate schedules with pivotable reporting, viewer animation or end-of-period maps.

### **Features and Benefits**

• Generate the most optimal mining sequence – Use mixed integer linear programing solved by IBM's CPLEX to find the best possible solutions to complex mine scheduling scenarios.

• Increase plan NPV – Add destination economics, account for operational and processing costs, apply discounting and let profitability to drive the mining schedule.

• Improve equipment efficiency – Constrain time spent hauling material for more practical scheduling or minimize/ maximize haul hours as a schedule objective.

• Determine destination cutoffs – Cutoffs are automatically determined by schedule objectives and constraints

• Visualize and audit schedule to make planning easier – Viewer interaction with MinePlan 3D and schedule animation makes scheduling easier.

• Generate multiple scheduling scenario quickly – Save time by running specific period windows when making project adjust, not the entire schedule.

• Achieve destination targets – Specify minimum and maximum destination requirements for schedule completion.

• Identify and resolve schedule bottle necks- Use infeasibility analysis reporting to identify schedule challenges and rank schedule constraints for relaxation.

• Stockpile management and blending – Apply filling sequences, use standard reclaim methods (FIFO, LIFO, and MWA) and blend based on schedule objectives.

• Improve plan communication – Create end-of-period maps to show where and when to mine and export reports for stakeholders.

### **Value Statement**

HxGN MinePlan Schedule Optimizer determines the most productive cut mining sequence to achieve the highest project profitability, and then generates practical short- to long-term project schedules. It features multi-horizon scheduling, integrated haulage database and equipment constraints, and mixed integer linear programing (MILP) for schedule optimization. Support provided in numerous languages by mine planning professionals in 20+ offices around the world. MinePlan 3D supports workflows for mine planning, operations, geology, and mine management, answering the needs for anyone who must visualize, analyze, monitor or evaluate mine information.



# **HxGN MinePlan Planner**



#### Overview

HxGN MinePlan Planner is a comprehensive solution offering manual scheduling and a cut repository for grade control purposes. It involves designing mining cuts, routing material within a destination network, and generating reports. It includes features for production engineers to assist in releasing polygons to different destinations, as well as reporting daily shovel progress and model-to-model reconciliation.

### **Features and Benefits**

- Store geometry and reserves for use in grade control
- Integrated with MinePlan Reserve for dynamic reserve calculations
- Import or design polygons
- Build solids between two surfaces
- Visualize directly in MinePlan 3D
- Route material through a series of destinations
- Auto-clipping of geometry
- Export to different format with the release tool
- Integration with FMS systems
- Track shovel progress with daily dig
- Run model-to-model reconciliation

### **Value Statement**

Intuitively and quickly manage cut design, material routing, progress reporting, and reconciliation using Planner for complete control over your grade control process.



# **HxGN MinePlan Haulage**



#### **Overview**

HxGN MinePlan Haulage can create material/routing reports, route profiles, and cycle time files. It manages detailed equipment and material routing requirements. Used in conjunction with MinePlan Planner, planning engineers can obtain immediate short- and long-term planning requirements for trucks and shovels.

### **Features and Benefits**

- Short- and long-term planning cycle times
- Material routing 3D road profiles
- Equipment requirements integrated with MinePlan Schedule Optimizer
- Provide requirement estimates to haulage equipment for short-term planning
- Calculate detailed round-trip schedule times based on route length, elevation profiles, spotting, loading, dumping, waiting, rolling resistance, and load state
- Estimate equipment requirements based on tonnage, net operating hours, mechanical availability, and utilization
- Generate cycle time data for use in other MinePlan planning and scheduling applications
- Rimpull curves for equipment definition
- Network and results validation

### **Value Statement**

HxGN MinePlan Haulage allows for the effective calculation of all routes and cycle times to enable the optimization of material movement. With Haulage, equipment utilization is fully optimized with minimal time spent on haulage design, thereby maximizing productivity, and reducing the cost of operations.



# MinePlan Activity Scheduler



#### Overview

HxGN MinePlan Activity Scheduler is an activity-based Gantt and calendar-scheduling approach to tactical planning. Create and configure the user environment. Attribute and assign resources to in-pit or underground tasks and track plan progress. Target reserves dynamically and modify haul routes on the fly. Route material based on destination targets and optimize blending. Report planned information automatically in multiple formats to communicate the schedule.

#### **Features and Benefits**

• Activity-based Gantt and calendar scheduling - Interact with the adaptive Gantt scheduling view to set dependencies between tasks, see planned progress, identify over utilization and run plan iterations

• Activity Attribution - Track all activity information needed to produce KPIs. Utilize embedded python for complex formulation and customized reporting. Build quick property templates for bulk attribution to save time planning

• Activity design - Schedule all mine activities/projects that have an estimated duration. Import existing activity geometry or leverage dynamic reserves to design activities while establishing a resource digline

• Resource assignment - Build site-specific fleet requirements to drive plan. Assign resources to identify utilization and determine resource priority. Add planned downtime for more plan resolution. Adjust resource rate based on material or period interval.

• Haul network - Live haulage allows for quick edits to the network and new material can be routed with the click of a button to verify haul fleet limitations

• Route material to meet destination constraint and targets - Set destination objectives and determine the best material routing scenario using a practical design. Achieve stockpile blending for an optimal mill feed

• Report and communicate plan results - Create an unlimited amount of reporting templates that can be toggled, docked, undocked and viewed at any time in the scheduling process. Use Release to send plan information automatically to stakeholders

• Publish and pull data to MineOperate UG Pro - Push sections of the Activity Scheduler plan to UG Pro to communicate directly with dispatch and eliminate the duplication of work.

### **Value Statement**

HxGN MinePlan Activity Scheduler (MPAS) tracks multiple site activities in one utility. Combine drill pattern scheduling with production planning, material routing, dump sequencing and haulage estimation to identify potential plan bottlenecks. Minimize the variance between plan and execution by tracking activity progress and identifying downstream challenges. Add planned downtime to identify daily bottlenecks and bring greater resolution to the schedule by eliminating averaged availabilities. Utilize MineOperate UG Pro to track plan changes automatically. Solve complex blending challenges easily by utilize best-in-class for optimization, CPLEX, to solve blending challenges and achieve destination targets ensuring the most optimal solution as opposed to heuristic methods. MPAS integrates directly with reserves and haulage to provide a seamless transition of data and provides an all-in-one planning solution. MPAS can also import existing plan information from MinePlan Schedule Optimizer and Blast to help eliminate the duplication of work and provide a good plan starting point.



# **HxGN MinePlan Blast**



#### **Overview**

HxGN MinePlan Blast is a comprehensive software utility for drill and blast and reconciliation. Avoiding the risk of high-wall stability problems, uneven blasting, poor fragmentation, unnecessarily high energy costs, and dangerous working conditions, MinePlan Blast incorporates charge and blast design templates based on sound engineering principles and proven methods that positively impact blast productivity and efficiency.

### **Features and Benefits**

- Reads and incorporates properties from block model (geology, rock type) into the workflow
- Quickly create blast designs and realize impactful efficiencies from fragmentation to energy usage
- Maximize safety and optimize design (boot-leg holes, voids, and obstacles)
- Optimize dilution and design via offered insights and best practices
- Benefit from scorecards that enable measurement and analysis of drill-operator performance
- Provides greater transparency between blast design and consumable reconciliation
- MinePlan Blast integrates with other third-party tools so you're certain to have real-time reporting that is critical for stronger, faster decision-making

### **Value Statement**

HxGN MinePlan Blast is a powerful drill and blast solution that can transform inconsistent blasts into a more productive, safe and economical process, leading to good return on investment. Blast provides a solid platform to ensure improved fragmentation, consistent loading, and better understanding of the high wall. The in-built reconciliation functionality improves transparency between blast design and explosive contractors through consumable reconciliation, resulting in better blasts and concise reconciliation. Drill and blast is a major unit in mine operations and too important to get wrong. MinePlan Blast helps you get it right.



# **HxGN MinePlan Axis**



#### Overview

HxGN MinePlan Axis is a production toolset for streamlining, auditing and rapidly executing grade control workflows. It uses blasthole information collected in the field to update the production block model and classify blocks by material, grade and destination for further polygon routing. The integrated system includes workflows for supporting grade control and reconciliation programs that are easy to use, fast, and auditable. Axis streamlines, optimizes and documents the grade control process and results in benefits ranging from improved confidence in grade control decisions, such as production and reconciliation.

### **Features and Benefits**

- Transparent, scalable, configurable solution
- Ability to design a standardized repeatable workflow
- Auditing and documentation of the process
- Algorithms for digblock optimization
- Password protection
- Integration with other mine planning solutions
- Integration with FMS and LIMS systems
- · Easy to learn and implement, easy to use and support

### **Value Statement**

HxGN MinePlan Axis is the most powerful and configurable grade control solution on the market, designed to accommodate the unique processes at your mine. It provides a platform for building standardized and repeatable workflows so that mill feed can be optimized through data-driven decisions, ultimately resulting in increased mine productivity and revenue. The built-in archiving functionality keeps track of processes completed, ensuring complete auditability and traceability of grade control decisions. Axis is a proven solution, implemented at more than 40 sites around the world.



# **About Hexagon**

Hexagon is a global leader in digital reality solutions, combining sensor, software and autonomous technologies. We are putting data to work to boost efficiency, productivity, quality and safety across industrial, manufacturing, infrastructure, public sector, and mobility applications.

Our technologies are shaping production and peoplerelated ecosystems to become increasingly connected and autonomous – ensuring a scalable, sustainable future. Hexagon's Mining division solves surface and underground mine challenges with proven technologies for planning, operations and safety.

Hexagon (Nasdaq Stockholm: HEXA B) has approximately 22,000 employees in 50 countries and net sales of approximately 5.1bn USD. Learn more at hexagon.com and follow us @HexagonAB.

Visit us at hexagonmining.com



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