Intelligent Mining Solution

MineScape Underground Coal

Underground Coal speeds the repetitive and time-consuming CAD processes that create underground designs.

By specifying design parameters through tables and templates, accurate designs are rapidly developed. Using standard MineScape tools to create a totally integrated system can further enhance these underground designs.

The features

Specialized CAD tools for fast accurate design work

Generates long- and short-term plans using comprehensive design templates, which can automatically build designs from the output of centre line, node and polygon data sets.

Assess design alternatives

Optimizes designs by applying user-defined geometry sets that are readily defined, saved and recalled to create and rapidly visualize changes.

Interactive 3D design

Uses powerful 3D CAD capability with specialized underground extensions to create a detailed design of panels, drifts and shafts.

The power of 3D visualization

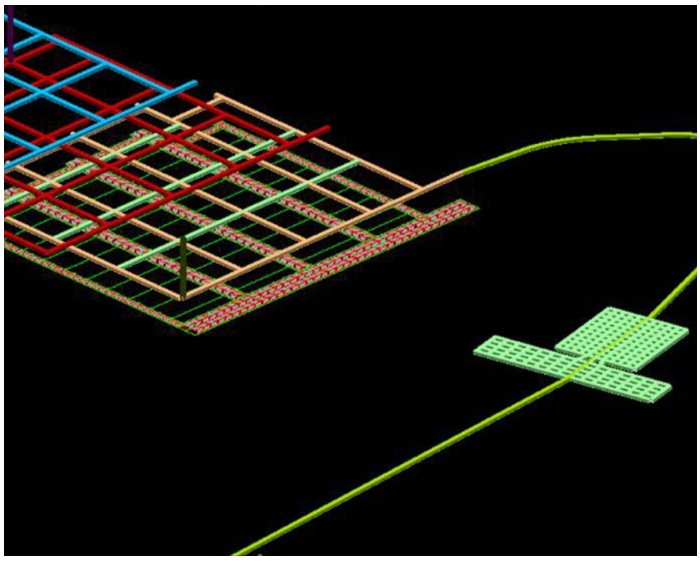
Provides true 3D visualization as designs are projected onto the relevant seam, which is linked with drifts and shafts. As a full 3D design, elements of the mine plan can be displayed in an endless variety of representations to assist in effectively communicating the design to others.

Integrated 2D design

Supports and enhances the 2D design approach with powerful CAD functionality and provides seamless integration with a complete 3D CAD system for optimum design evaluation.

Longwall design simplified

Applies dimensions and creates longwall designs using templates. The design may be further enhanced using CAD tools to merge or split pillars, add bleeder roadways and impose specialized intersection designs. Designs may be systematically created with CAD system classification of long-term design components in terms of roadway recovery (percentage extracted) and the detailed short-term components that are interrogated to reveal individual roadway subdivisions.



Integrated fully with MineScape Survey

Rapidly updates survey workings using specialized CAD functions. The system provides scope for user enhancement and provides compatibility with survey data/ equipment standards. Features include user-defined symbols to identify the location of equipment, ventilation, transport, and reticulation, which may be required by management or for statutory purposes.

Volumes and scheduling

Provides evaluation options for a combination of long-term blocks using recovery percentage and short-term heading/cross-cut design.

Reserves

Enables flexible reporting of comprehensive data sets. Ensures that volumes, tons and grades are accurately calculated for every component.

The benefits

Fully integrated

Integrates with MineScape's scheduling, geological and survey functionality.

High flexibility

Ensures flexibility in application with extendibility afforded by the capacity to create user-defined commands for site-specific requirements.

Easy to use
Outputs accurate plans simply, yet yields sophisticated designs. Input plans become 3D models within which volumetrics and qualities can be correctly generated.

Accurate
Generates accurate designs including elevation, drainage and pillar size. Multi-seam workings are automatically superimposed and can be interrogated dynamically.

Quick access
Enables design alternatives to be assessed quickly and their recoverable tonnages and qualities calculated.

Fast storage and recall
Stores and quickly recalls geometry of standard panels. In addition, it utilizes special mine designs that can be input to CAD and copied to any part of the design.

Automatic generation
Produces designs automatically over large areas bounded by mining constraints.

Flexible designs
Outputs designs as short-term and detailed, or long-term and more general, or a combination of both.

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