STOPE OPTIMIZATION

The new Stope Optimization capabilities provides underground engineers the ability to automate the generation of stope designs for a variety of underground mining methods. Mining engineers can rapidly generate multiple design options and analyze these to select the most optimal design whilst ensuring it adheres to mining constraints. Utilizing the industry proven technology from Alford Mining Systems (AMS), mining engineers are able to optimize their strategic plans based on the selection of either value, cut-off grade or calculated value.

Stope Optimization allows for mining dilution and control over many other optimization and stope design constraints to ensure as little manual work is required at later planning stages, saving time and improving efficiency.

Key Features

- Determine the optimal underground mining areas in the form of stope designs
- Reduce time taken compared to other methods
- Maximize recovered resource value for underground mines
- Produce stope inventories from a block model that spatially represents the location of mineralization
- Optimize strategic plans based on selection of either value, cut-off grade or calculated value
- Enforce a number of practical controls around safety such as stope and pillar width, hanging and footwall attributes, exclusion zones, and standoff distance
- Integrated into Surpac for a seamless user experience and advanced scripting capabilities

IMPROVED USER EXPERIENCE

To improve design workflows and increase efficiency, Surpac 2019 includes enhancements for collaboration and data management through the integration between Surpac and the 3DEXPERIENCE platform. This improves data management and synchronization on 3DSpace from within the Surpac user experience.

With this update, data management is now more efficient, configurable, and able to be done from within Surpac itself, removing the need to login to the 3DEXPERIENCE platform to manage mining data.

In addition, Surpac 2019 sports an improved user interface with a custom theme engine.
Key Features

• Interact with 3DSpace file management functions directly in the Surpac user interface while one or more sync or recursive sync functions are running
• Clean up deleted documents, folders, and workspaces when the user performs an operation at that level
• Declare the proxy URL to be used within the Surpac application
• Reduce the need to log into 3DEXPERIENCE platform to perform tasks related to versioning and data management
• New themes ‘Light’ and ‘Dark’ for better user experience

OMF SUPPORT

Surpac 2019 now supports the OMF (open mining format) file exchange format, a new standard for the mining industry to exchange mining data between separate mining software applications. Dassault Systèmes became one of the first companies to adopt the guidelines, thus displaying a thought leadership position in the industry.

This capability enables seamless and reliable transfer of data between mining software solutions eliminating the time currently required for manual data transfer and conversion. The current implementation of OMF v 1.0 supports both string data and triangle data.

Key Features

• Share data between software packages facilitating interoperability and data integrity
• Eliminate manual transfer processes creating a more streamlined and efficient approach

OMF (Open Mining Format) support.

OTHER ENHANCEMENTS

Additional enhancements or defect fixes that improve work performance include:

• Context commands for block model quick constraints and to edit a block
• Double-click in graphics window now sets the screen centre to view the data
• When loading SDM files, the progress bar now indicates the loading process
• String constraints has been improved and now supports a greater level of precision
• Improved Vulcan block model attribute reading Datamine rotated models are now supported