

4.9

- New** Comprehensive redesign of the user interface for each processing step, enhancing workflow and user experience (MultiPhoto)
- New** Verification of input data checks for inconsistencies in GPS measurements during image loading (MultiPhoto)
- New** Integrated user interaction to remove GPS information from individual images, improving the handling of inconsistent GPS measurements (MultiPhoto)
- New** Simplified selection of the geographical coordinate system (MultiPhoto)
- New** Extended GeoTiff exports now support all EPSG coordinate systems (MultiPhoto)
- New** Trimming along a user-adjustable plane (Reference Plane) (SurfaceTrimmer)
- New** Redesigned user interface, with a focus on restructuring the Interhole Distances dialog (BlastPlanner)
- New** PDF report including analysis and color-coded visualization of distances between boreholes and rows at user-defined heights in a plan view (BlastPlanner)
- New** Extended report with Measure-While-Drilling analysis (BlastPlanner)
- New** Extended generic drill pattern import, including borehole diameters (BlastPlanner)
- Enhanced** Tool tips for improved guidance and usability (MultiPhoto)

4.8

- New** DXF export of the crest and toe line of the blast site (BlastSiteGenerator)
- New** Import of delimiter positions of the blast site from a text file (BlastSiteGenerator)
- New** Import of delimiter positions of the blast site from a text file (BlastSiteGenerator)
- New** Adjustment of the discontinuity mapping for ShapeMetriX import directly in the software (BlastPlanner)
- New** User-configurable export of the drill pattern according to the IREDES standard (BlastPlanner)

- New** Calculation of the blast site volume (Inspector)
- Enhanced** Data processing and user interaction
- Enhanced** General improvements for using multiple displays and high-resolution displays
- Enhanced** Import and export of georeferenced delimiters to ease final wall design and pattern adjustments (BlastPlanner)
- Enhanced** Editing of the Top Level Surface of the blast site with multiple selection of 3D points in the 3D
- Enhanced** User interface of the measure while drilling plot for improved usability and user experience (BlastPlanner)
- Enhanced** CSV export for profiles and minimum burden data (BlastPlanner)
- Enhanced** Layout improvements in the PDF report (BlastPlanner)

4.7

- New** Layout improvements in the PDF report (BlastPlanner)
- New** Visualization of deviations in the drill pattern in a "Heat Map"
- New** Import and visualization of measure while drilling data
- New** Deviation analysis of measure while drilling data with highlighting of peculiarities and associated boreholes in the software
- New** Import of mapped discontinuities in the JMX Analyst and visualization of intersections with boreholes in the minimum burden diagram
- New** Customized import of borehole survey data according to the IREDES standard (BlastPlanner)
- New** Keyboard shortcut "M" for drawing mucklines (BlastPlanner)
- New** Advanced report including Measure While Drilling plots (BlastPlanner)
- New** Specification of the drill pattern's total area in the interhole distances dialog
- Enhanced** Configuration for velocity, acceleration, pressure, force, flow, power, and rotational speed in the central window settings
- Enhanced** Checkboxes for the visibility of 3D models in the viewer available in all software components

4.6

- New** Interactive color-coded visualization of distances between individual boreholes, known as Interhole Distances (BlastPlanner)
- New** CSV export of Interhole Distances (BlastPlanner)
- New** Alternative sequential numbering of boreholes (BlastPlanner)
- New** User-defined scaling of the Profiles and Minimum Burden diagram in the report (BlastPlanner)
- New** Extended generic probe import of borehole trajectories from down-the-hole probes accepts the DTH file extension (BlastPlanner)
- New** PDF report (Inspector)
- Enhanced** Clear arrangement of manuals in the Center Window, divided into General guidelines, field procedures, and Components, which include individual software components
- Enhanced** Minimum Burden diagram with visualization of sections beneath Muck Lines (BlastPlanner)
- Enhanced** Smooth drawing of Muck Lines (BlastPlanner)

4.5

- New** Software installer with silent installation capability via command line and setup settings
- New** Geo-referencing of the 3D model directly in the software (BlastSiteGenerator)
- Enhanced** CSV import functions with a new import dialog
- Enhanced** Re-organized dialog for general software settings
- Enhanced** HTML manuals with paragraph numbering
- Enhanced** Re-designed and extended BlastPlanner report (BlastPlanner)
- Enhanced** Re-organized, clearly arranged user interface for drill pattern generation (BlastPlanner)
- Enhanced** Automatic and optimized placement of boreholes (Minimum Burden Mode) (BlastPlanner)
- Enhanced** Error analysis and warnings (BlastPlanner)

4.4

- New** HTML and PDF versions of UAV field procedures available directly in the software via the central window
- New** DXF export of the crest and toe line of the blast site (BlastSiteGenerator)
- New** Import of delimiter positions of the blast site from a text file (BlastSiteGenerator)
- New** Integrated rock mass quality analysis from drill monitoring data, visualized in individual borehole plots and with a color overlay in the 3D viewer (BlastPlanner)
- New** Adjustment of the discontinuity mapping for ShapeMetriX import directly in the software (BlastPlanner)
- New** User-configurable export of the drill pattern according to the IREDES standard (BlastPlanner)
- New** Calculation of the blast site volume (Inspector)
- New** Minimum Burden mode (beta version) for automatically optimized placement of boreholes (BlastPlanner)
- New** Exportable plan views of distances between adjacent boreholes at various depths (BlastPlanner)
- New** Move borehole positions in respect to the profile plane (BlastPlanner)
- New** Lock subdrilling for the drill pattern, individual rows, or single boreholes (BlastPlanner)
- New** Feature: Import designed drill pattern from CSV (BlastPlanner)
- New** CSV export for minimum burden distances (BlastPlanner)
- New** Display of the altitude at the borehole collar and floor level in the minimum burden diagram (BlastPlanner)
- New** User-adjustable color scheme for visualizing the burden situation on the 3D model (BlastPlanner)
- Enhanced** Multiple improvements in data processing and user interaction, including support for multiple displays and high-resolution displays
- Enhanced** Import and export of georeferenced delimiters to ease final wall design and pattern adjustments (BlastPlanner)
- Enhanced** Top Level Surface editing with multiple 3D point selections in the 3D viewer (BlastPlanner)
- Enhanced** User interface of the Measure While Drilling plot for improved usability (BlastPlanner)
- Enhanced** CSV export for profiles and minimum burden data (BlastPlanner)

- Enhanced** Layout improvements in the PDF report (BlastPlanner)
- Enhanced** Volume to blast calculation by defining the first borehole to blast (BlastPlanner)
- Enhanced** Plan view displays of inclination, azimuth, and lengths, with multiple borehole selection (BlastPlanner)
- Enhanced** Adjustable report options including page and font sizes, and information on borehole lengths and inclinations (BlastPlanner)
- Enhanced** Error analysis and warnings (BlastPlanner)
- Enhanced** Display of the reconstruction report for 3D models generated by ShapeMetriX MultiPhoto v4.0 (BlastPlanner)

4.2

- New** Dark theme mode is available for all software components. Users can select the dark theme in the settings, which includes newly designed icons to complement both the original and dark themes
- New** Redesigned user interfaces to improve the user experience and usability
- New** The new 3D viewer meets and exceeds the demands of large 3D models generated from drone imagery, providing higher detail in surface and photo textures without compromising performance or user interaction. It loads data faster, increasing user productivity
- New** 3D navigation features to rotate the 3D model from the current point of view and orient the model from a top-down camera view
- New** 3D navigation feature using Arrow keys for straight motion and Ctrl+Arrow keys for rotation
- New** User-definable background color for the 3D viewer
- New** Features for enabling mouse navigation in the stereo view
- New** Clear arrangement of manuals in the Center Window, divided into General topics such as guidelines and field procedures, and Components, which include individual software components
- New** Interactive color-coded visualization of distances between individual boreholes, referred to as Interhole Distances (BlastPlanner)
- New** CSV export of Interhole Distances (BlastPlanner)
- New** Alternative sequential numbering of boreholes available (BlastPlanner)
- New** User-defined scaling of the Profiles and Minimum Burden diagram in the report, allowing for individual or uniform plot scale (BlastPlanner)

- New** Extended generic probe import of borehole trajectories from down-the-hole probes, accepting DTH file extension (BlastPlanner)
- New** PDF Report (Inspector)
- Enhanced** Command line installation
- Enhanced** Visualization of sections beneath Muck Lines in the Minimum Burden diagram (BlastPlanner)
- Enhanced** Smooth drawing of Muck Lines (BlastPlanner)
- Enhanced** Minor bug fixes (SurfaceTrimmer)

4.1

- New** BlastMetriX 3D is released with 64-bit applications only
- New** A dongle update is required for most users before installing BlastMetriX 4.1 to apply all new functions to the software
- New** Option to set the displayed texture resolution for the 3D viewer
- New** 'Clean up' button for removing temporary data if 3GSM cache directories are found
- New** Software installer including the possibility of silent installation using the command line with appropriate setup settings
- New** Digital signature for verifying the authenticity of the software
- New** Target heights can be edited before generating and saving the blast site (BlastSiteGenerator)
- New** Importing borehole rows from ".csv" files allow the addition of boreholes to the existing drill pattern (BlastPlanner)
- New** The description of the Blast Site can be edited directly from the printing/exporting dialog (BlastPlanner)
- New** Re-designed and extended BlastPlanner report (BlastPlanner)
- Enhanced** CSV import functions with a new import dialog
- Enhanced** 3D mesh generation
- Enhanced** Better handling of operations that require administrator privileges, such as installation of license or calibration data
- Enhanced** Multiple calibration files can be installed and removed at once

- Enhanced** Re-organized dialog for the general software settings
- Enhanced** HTML manuals are improved with paragraph numbering
- Enhanced** PDF versions of the manuals available directly in the software
- Enhanced** More feedback during trimming (SurfaceTrimmer)
- Enhanced** Target heights can be edited before generating and saving the blast site (BlastSiteGenerator)
- Enhanced** Error analysis and warnings (BlastPlanner)
- Enhanced** Re-organized, clearly arranged user interface for drill pattern generation (BlastPlanner)
- Enhanced** Improved automatic and optimized placement of boreholes in Minimum Burden Mode (BlastPlanner)
- Enhanced** Crash fix when moving the border plane (BlastPlanner)

4.0

- New** Re-designed user interface (BlastPlanner)
- New** Minimum Burden mode, a beta version, for automatic optimized placement of boreholes (BlastPlanner)
- New** Exportable plan views of distances between adjacent boreholes at various depths, referred to as inter-hole distances (BlastPlanner)
- New** Move borehole positions in respect to the profile plane (BlastPlanner)
- New** Lock subdrilling for the drill pattern, individual rows, or single boreholes (BlastPlanner)
- New** Display of the reconstruction report of 3D models generated by ShapeMetriX MultiPhoto v4.0 (BlastPlanner)
- New** Import designed drill pattern from CSV (BlastPlanner)
- New** CSV export for minimum burden distances (BlastPlanner)
- New** Display of the altitude at the borehole collar and of the floor level in the minimum burden diagram (BlastPlanner)
- New** User adjustable color scheme for the visualization of the burden situation on the 3D model (BlastPlanner)
- New** Backward compatibility of 3D models with the new feature “Export 3D model as jm3 v3.0” (SurfaceTrimmer)

- New** User definable floor level (BlastPlanner)
- New** TLS markers/collars now selectable in 3D view (BlastPlanner)
- New** New component for computing volumes, available as add-on to existing BlastMetriX 3D systems (VolumeCalculator)
- New** Volumes can be determined either between two different 3D models or between a single 3D model and the ground surface (VolumeCalculator)
- Enhanced** Volume to blast calculation defined by the first borehole to blast (BlastPlanner)
- Enhanced** Improvement in the plan view, including display of inclination, azimuth, and lengths, along with multiple selection of boreholes (BlastPlanner)
- Enhanced** Report options include adjustable page and font sizes, as well as information on borehole lengths and inclination (BlastPlanner)
- Enhanced** Performance improvement for the handling of large blast sites with several hundred shotholes (BlastPlanner)
- Enhanced** Rock density value is now persistent (BlastPlanner)
- Enhanced** Crash fix when moving the border plane (BlastPlanner)
- Enhanced** Error analysis and warnings (BlastSiteGenerator)
- Enhanced** The geo-referenced tag of the 3D model can be removed on loading (BlastSiteGenerator)