ShapeMetriX

RELEASE NOTES V3

3GSM

3gsm.at

3.9

New Visualization of planarity by configurable topographic maps (Analyst)

New Cut-off Plane dialog: A plane at definable distance, parallel to the Reference Plane, separates the model, providing the face area in front of and behind the cut-off plane (Analyst)

New Annotation: Volume, with a polygonal line outlining the border of a volumetric body (Analyst)

New Missing units in structure list added (Analyst)

New Supports import data from ShapeMetriX Mapper, a mapping tool for tablet PCs used in front of the face (Analyst)

New Fusion of Normalizer mode and North Correction mode (Normalizer)

New Two Range Poles mode: Using two non-parallel range poles with known target distance to scale, vertically orient, and north-correct the 3D image (Normalizer)

New User-defined Reference Plane (SurfaceTrimmer)

New Automatic camera selection still works even if EXIF data is compromised by third-party programs

New Calibration is selectable if no EXIF information is found at all (RecAssistant)

New Support for Windows 10

New Extension of capability by three additional 3D images in ShapeMetriX ModelMerger

Enhanced Speed-up in drawing analysis zones (Analyst)

Enhanced Refactored User Interface (SurfaceTrimmer)

Enhanced Trim operations are now applicable locally or globally depending on user settings (SurfaceTrimmer)

Enhanced New function to remove a whole 3D sub-image (SurfaceTrimmer)

Enhanced Speed-up of data save process (SurfaceTrimmer)

Note Extension of capability may require a 64-bit version of software and operating system

3.8

New Support for Windows 8, both 32-bit and 64-bit

New Support for Russian language

New Analysis Zone: New annotation for selecting multiple measurements (Analyst

New Exclusion Zone: New annotation for masking zones (Analyst)

New Fully refactored analysis interface for Multiple Scanline Spacing (Analyst)

New New data export format (Analyst)

New Refactored report generation (Analyst)

New User-definable elevation range for contour lines (Analyst)

New User-definable, new algorithmic simplification of contour lines (Analyst)

Enhanced Spacing Analysis for Analysis Zones and entire StructureMap (Analyst)

Enhanced Spacing, trace length, and bridge length statistics for Analysis Zones and entire StructureMap (Analyst)

Enhanced Configurable statistics calculation considering areas, traces, bridges, and exclusion zones

Enhanced Visualization of the projection plane (Analyst)

Enhanced User-defined orientation of the projection plane (Analyst)

3.7

New Automatic selection of camera and lens after selecting the photos for cameras launched after 2006 (ReconstructionAssistant)

New Orientation data export compatible with the software Sphaira (Analyst)

New User-defined denomination of control points (Referencer)

Enhanced Introduction of orientation weights, considering structure sizes when calculating joint set orientations (Analyst)

Enhanced Extension of automatic clustering to account for weighted orientations (Analyst)

Enhanced New mechanism for filtering structures according to their sizes (Analyst)

Enhanced Scanline mechanism (Analyst)

Enhanced Automatic Region Grow mechanism (Analyst)

Enhanced Possibility to transform existing structure maps onto 3D images in a new coordinate system (Analyst)

3.6

New 64-bit support, allowing massively more measurement points per 3D image

New Ability to connect more images to a single large 3D image

New Display filters to show/hide structures based on user-defined settings (Analyst)

New OBJ export, including texture (Analyst)

New Additional denomination for surveyed control points, including import (Referencer)

New Later geo-referencing of 3D images and structure maps (Referencer)

New Support of CSV format for imported coordinates (Referencer)

New Additional warning at small base lengths (ReconstructionAssistant)

New Additional warning for incorrect lens settings (ReconstructionAssistant)

New Compatibility with merged 3D images (Normalizer)

Enhanced Memory management, minimizing memory requirements for displaying very large 3D images

Enhanced 3D surface triangulation

Enhanced Reviewed VRML export without restrictions on the number of points (Analyst)

Enhanced Graphical display of 3D image annotations (Analyst)

Enhanced Handling of merged 3D images (SurfaceTrimmer)

Enhanced Statistics on merged 3D images (SurfaceTrimmer)

3.5

- **New** System configurations: Standard, Tunnel, and Versatile
- **New** Compatibility with Windows 7
- **New** Automatic identification of tie points in 3D image generation
- **New** User-definable seams for image merging
- **New** Special support for merging 3D images from underground operations
- **New** Minimal user interaction for merged 3D images from surface applications
- **New** Simultaneous loading of several 3D images
- **New** Configurable general section plot in 3D image assessment
- **New** VRML export
- **Enhanced** String refactoring of the ShapeMetriX ModelMerger component
- **Enhanced** Handling of extreme geometries in 3D image generation

3.0

- **New** Introduction of automatic clustering of discontinuities for 3D image assessment
- **New** Marker for water occurrence in 3D image assessment
- **New** Matching strategy for “fast” reconstruction, leading to denser models at the same computing time (MultiPhoto)
- **New** New! Live display during coarse model generation, showing real-time camera locations in a live 3D view while adding new cameras (MultiPhoto)
- **New** Custom set of loaded images can be selected/deselected for the reconstruction process (MultiPhoto)
- **New** Changing the project name also changes the 3D model name accordingly (MultiPhoto)
- **New** Region of interest supports straight lines as well as arbitrary shapes (MultiPhoto)
- **New** Several new cameras added to the camera database (MultiPhoto)

Enhanced	Higher quality of 3D models in terms of surface point localization and data coverage (MultiPhoto)
Enhanced	Faster computation (MultiPhoto)
Enhanced	Support for standard machines without special graphics hardware; still recommend NVidia© graphics cards for faster computation (MultiPhoto)
Enhanced	“Normal” density matching delivers much more points at the same computation time (MultiPhoto)
Enhanced	More information on loaded image data, such as camera type or GPS information (MultiPhoto)
Enhanced	Automatic support of GPS information if available (MultiPhoto)
Enhanced	Surface meshing to avoid accidentally formed micro gaps in the surface mesh under certain circumstances (MultiPhoto)
Enhanced	Refactoring of internal algorithms, leading to improved reconstruction accuracy
Enhanced	Extension of multiple CPU usage for faster 3D image generation
Enhanced	Toggle between single 3D images within merged 3D models
Enhanced	Automatic discontinuity segmentation
Enhanced	Change of units