

ENSOMOSAIC

Tools for topographic mapping



WHAT ARE ENSOMOSAIC TOOLS FOR TOPOGRAPHIC MAPPING?

EnsoMOSAIC tools for topographic mapping form a **complete set of hardware and software for digital mapping; from aerial image capture to stereoscopic 3-D data extraction**. The package contains all the software for flight planning, image capture, image processing and data acquisition; and all the hardware for imaging and data processing, excluding an aircraft and including training and support.

With EnsoMOSAIC mapping package you can independently carry out mapping projects, without depending on external aerial image providers and without relying on third party data processing. The entire process is under your control on a schedule you decide.

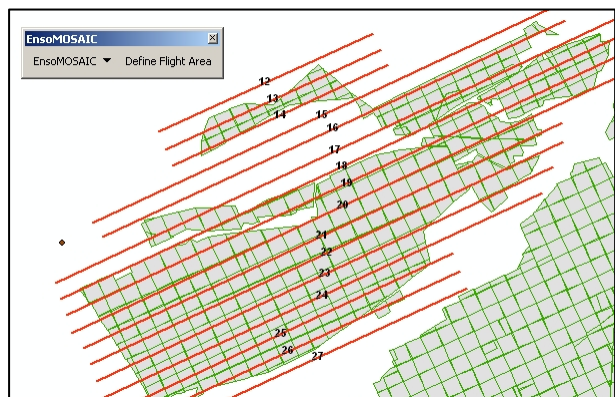
WORKING PHASES

1. Flight planning

Flight planning is carried out with EnsoMOSAIC tools specifically designed to produce flight plans that integrate with imaging software. There are tools for both numerical and graphical planning.

2. Imaging flight

Flight plans are read into NavCam navigation and camera control software, which triggers the camera and labels the images with GPS coordinates. A high-end medium-format camera is preferred for image capture.



3. Image processing

All the processing steps are integrated into EnsoMOSAIC image processing software. No file transfers are needed, all files are interlinked automatically.

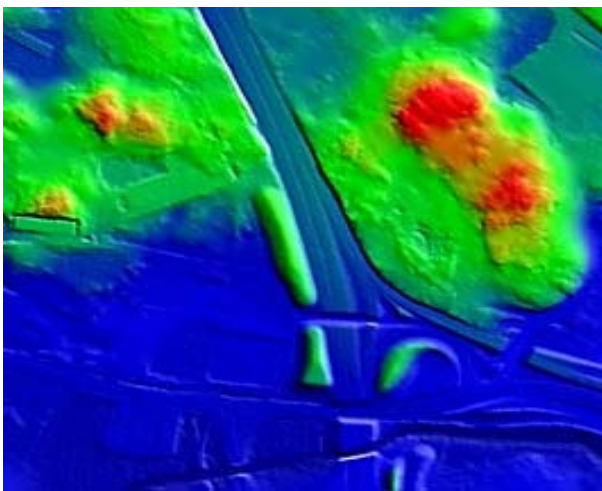
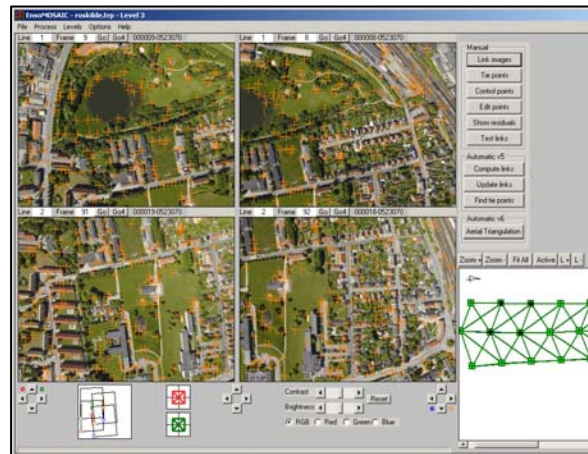
WORKING PHASES

3.1 Block definition

Whenever EnsoMOSAIC system is used for image capture, the block definition is automatic. Block editor checks and corrects for possible errors of GPS labelling. The user selects a map projection.

3.2 Aerial triangulation

Aerial triangulation automatically rectifies the images applying block adjustment and blunder detection. User input is needed only to define process parameters and to measure ground control points for increased geographical accuracy.



3.3 Elevation model

A Digital Elevation Model (DEM) is calculated by interpolating between the tie points. Alternatively, an external model may be utilized.

3.4 Ortho-mosaic

Ortho-mosaics are resampled from original images with the results of triangulation and DEM calculation. Several options and methods are available to control speed and spectral quality.

4. Stereo mapping

EnsoMOSAIC 3D software reads EnsoMOSAIC image orientations and block definitions for stereoscopic 3D data collection. Extract 3D data from EnsoMOSAIC images with a computer connected to a stereo display and equipped with a high-end graphics card.

3D data collection is directly linked with your GIS environment, such as ArcGIS, AutoCAD or MicroStation. Digitize features into a database and automatically measure altitude points to produce terrain grids, contour lines and 3D visualization.



WORK WITH MOSAICMILL!

Please contact us for further information and for complete technical specifications and commercial details of EnsoMOSAIC imaging and mapping systems.

MosaicMill Oy

Mr. Janne Sarkeala janne.sarkeala@mosaicmill.com +358 40 539 3324

Mr. Ismo Hippi ismo.hippi@mosaicmill.com +358 40 596 5322

Teknobulevardi 3-5, 01530 Vantaa, Finland

www.mosaicmill.com