IMMAGINA from Drones Photography to high precision Topography



IMMAGINA is the new way to get high precision topography by applying your professional skills on a three-dimensional model obtained from a series of photos from DRONE.

IMMAGINA has been designed, realized, implemented, tested and assisted by professionals of this specific field who know exactly the requirements needed to reach high performance.

EVERYTHING IN ONE SINGLE SOFTWARE!

With **IMMAGINA** you can perform massive land surveys just from the field in less than one hour. **IMMAGINA** is a powerful photogrammetry software specifically created by topographers that allows you to directly select and manage the points and that you want to include in your surveys.

It provides you all the tools you need to get accurate topographic surveys, volume calculations, level curves, profiles, etc.

Moreover, you can build your own topographic surveys up from point clouds generated by other applications, and other tools such as LASER SCANNER.

THREE OPERATIVE MODES

Depending on your needs you can choose how to obtain the topographic work according to three operating modes that can ensure the desired speed and accuracy:

- Fully automatic, a self-composition will take you from choosing pictures to point cloud with a single click;
- Semi-automatic, with the possibility to customize the automatisms according to your working habits and preferences;
- 3. Followed step by step, in which you have total control of the operations to be carried out and choose each parameter according to your needs.

Every single job can be performed using different modes: it's the software that adapts to your way of working and not the other way around.

WHAT CAN YOU DO ON PICTURES



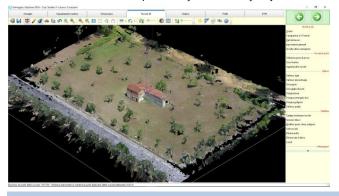
- Check the overlap needed to make photogrammetry;
- Visualize them with all their features and decide whether to eliminate some of them (if blurred, underexposed, etc) in order not to not to contaminate the accuracy of the survey;
- Insert masks into areas that may interfere with the 3D model creation

ONCE YOU HAVE THE 3D CLOUD

Now every point generated can be a three-dimensional topographic point! In fact, both in the 3D cloud model and in the orthomosaic you can achieve what you'd do on the field:

- Choose and measure DTM points avoiding vegetation and other elements with functions and filters under your direct control
- Define lines of discontinuity in unexpected changes of slope
- Draw dressing elements such as polygons to represent buildings, streets, fences, backgrounds, etc.
- Indicate the points where you want to construct longitudinal profiles
- Measure distances, areas, perimeters.
- And much more that you can discover while using it...

It's as if you've got your GPS receiver in your hand, so you can choose which points to place on the chart, either manually or with automatic tools. Your clients will be impressed by the accuracy of your results.



A COMPLETED TOPOGRAPHIC CAD

A real topographic CAD in which you will find, automatically and in real time, what you indicated on the Cloud. You can also create a very defined orthomosaic on which you can create your topographic elements with a simple mouse click. Here you will also have the chance to complete the documents to be delivered with the execution of:

- Listed plan
- Mathematical model of triangular and square mesh relief considering discontinuities
- Level curves with 8 different specifications
- DXF and/or DWG files
- Elegant report of your entire work
- Cloud export in a variety of formats including STL for 3D printing and BIM
- Export coordinates of points to ASCII file.

DTM & PROFILES

You can define profiles directly from the CAD and intervene for:

- Establish the cartouche and the scales of representation
- Delete, insert, edit stakes visually
- Export all to DXF/DWG and/or Print.

A fascinating 3D visualization of the DTM you created in which you can navigate to get a realistic view of the terrain and represent it in many ways. In it it will also be possible:

- Display the curves in 3D
- Spread the photo of the orthomosaic in 3D
- Cut the model according to the profiles
- Calculate the volumes of excavation and excavation precisely with different possibilities: for an assigned plane, for a sloping plane, calculating a compensation plan between excavation and excavation, between two different models thus being able to calculate and display perfectly the volumes of excavation and excavation for quarries and landfills.





Strada IACOB NEGRUZZI nr. 44, 011094, Bucuresti-1 (+40)722 620 305 e-mail:topotrade@yahoo.com www.topotrade.ro