ChumDan Geospatial Information Co., Ltd.

Company profile
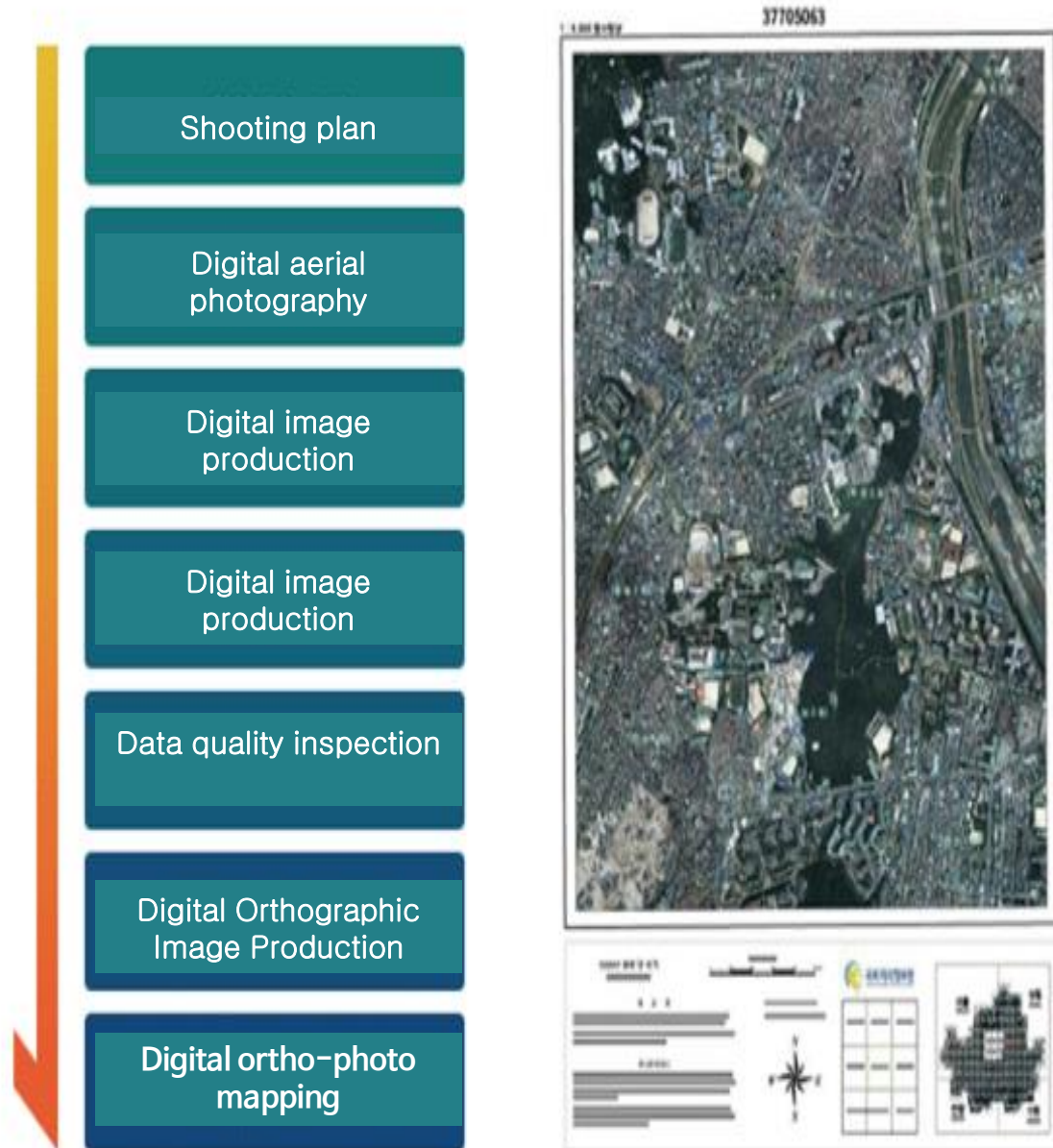
Aerial Photography

◆ Aerial Photography

      Aerial photography is an advanced technology that contains high-resolution image information, and it produces topographic maps and shows ortho-photo images.

      By getting high-resolution images including spatial location information and numerical data with the infinite range of applications. We provide high-quality information on land use and maintenance, including the production of maps of various scales, geology, cadastral, transportation, military use, urban planning, and civil engineering design.

Aerial Photography

Aerial Photography

Shooting plan

Digital aerial photography

Digital image production

Digital image production

Data quality inspection

Digital Orthographic Image Production

Digital ortho-photo mapping

Digital ortho-photo mapping procedure

◆ Geodetic Surveying

As a technology for collecting and accumulating qualitative and quantitative information such as distance, angle, direction, position, elevation, area, volume by determining the geometrical location of the earth's surface and all existing objects, we implement integrated standard points, national level points, and facility surveying.

Leveling

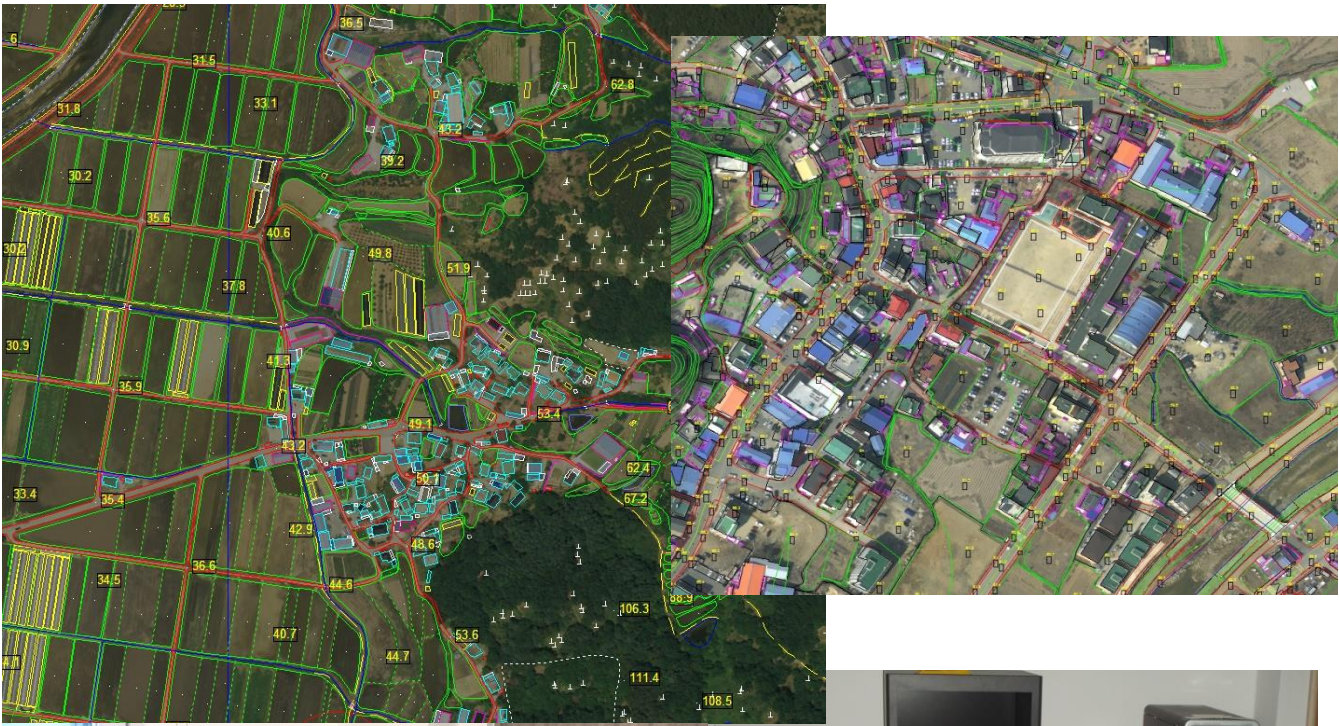GPS surveying

Skyscraper displacement survey

Construction survey

Stereo Plotting

◆ Stereo Plotting

Converting a photo into a digital map using digital photogrammetry system data is to transform the topography taken in the air into points and lines on the map during the process of producing the topographic map which is necessary to produce maps,

In order to produce accurate maps, we use state of the art optical equipment highly and work with skilled personnel.

Digital plotter

Geodetic, Underground Utility Lines, and Cadastral Surveying

◆ Underground Facility Surveying

We perform real-time facility surveying, GIS DB construction, and system DB loading by investigating/exploring and measuring 7 underground facilities such as water, sewage, electric power, gas, heating, communication and oil pipeline.

◆ Cadastral Surveying

A responsible office implements cadastral state surveying and cadastral boundary restoration surveying that determines the boundary or the area of each land according to the authority or the application of the interested person for the purpose of registering the land in land study or restoring the boundaries registered in the cadastral study on the index indicator.

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http://www.chumdan21.co.kr

Spatial Information D/B Construction

◆ Spatial Information D/B Construction

Spatial information refers to information that is required for making a decision and spatial recognition which is related to location information of natural or artificial objects existing in space such as the ground, underground, water, and underwater.

We build information system and make it to be used as a wide application field in order to utilize spatial information effectively by converting GIS-geographical information which is necessarily required for human life into computer data.
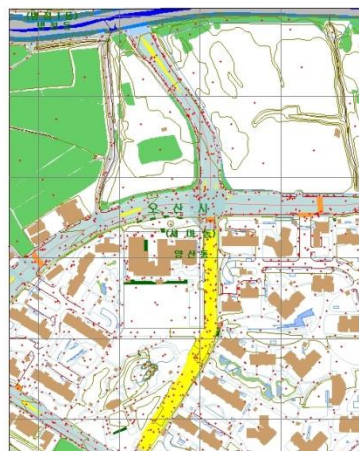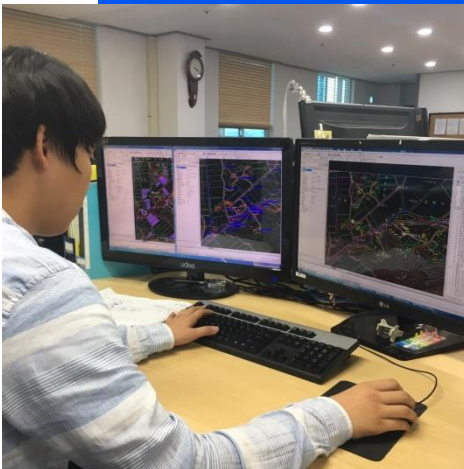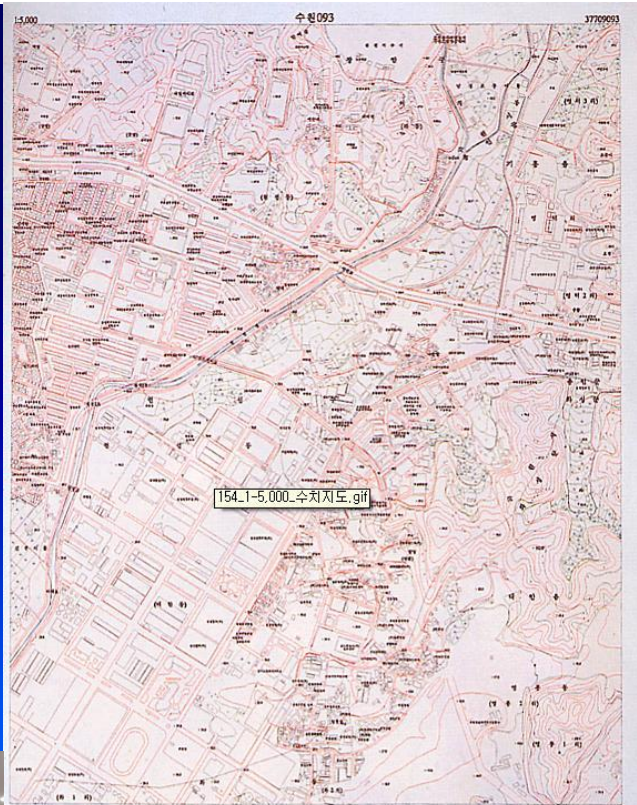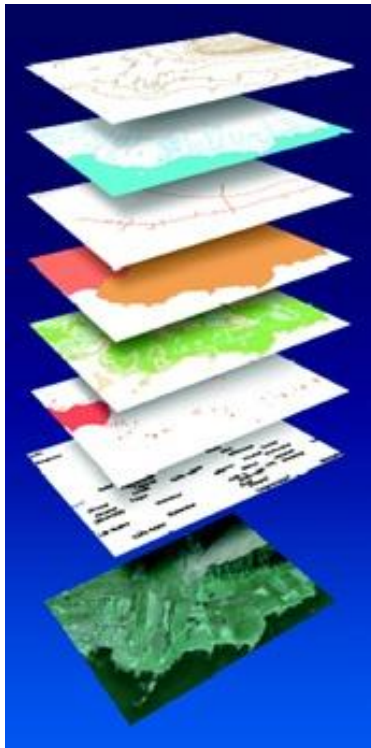
Engineering Design Surveying

◆ Engineering Design Surveying

We cooperate with domestic engineering companies to perform surveying work such as water resources, water supply and drainage, roads, and railways. By using surveying skills which are researched and developed by the company, we are able to work fast rather than existing surveying and make high-quality results.
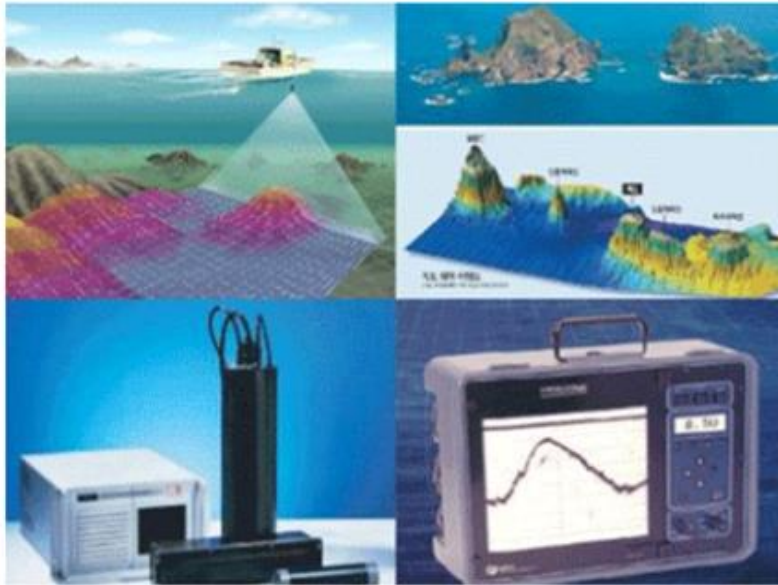
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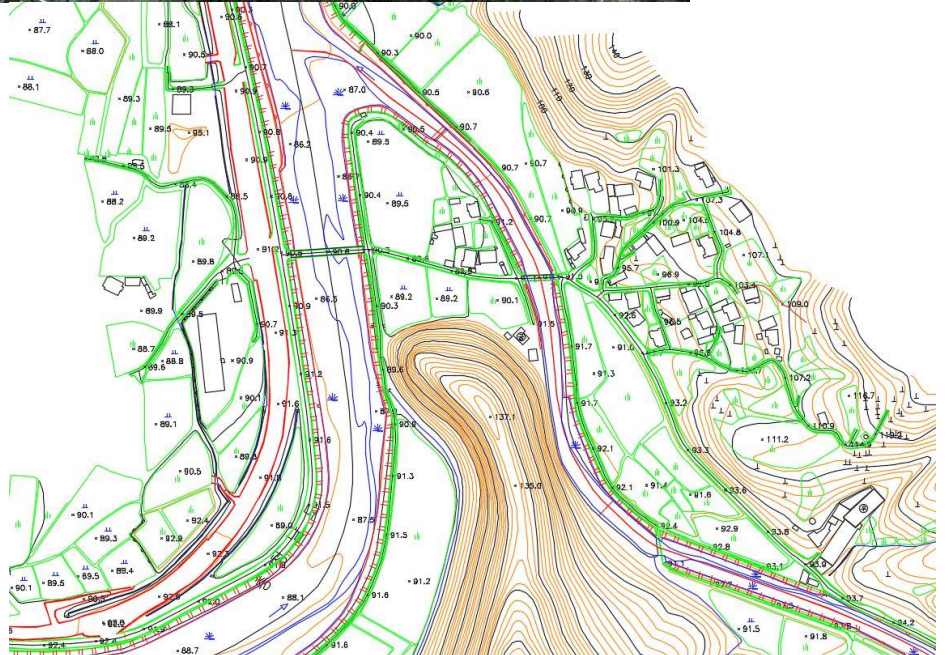
Coast Surveying

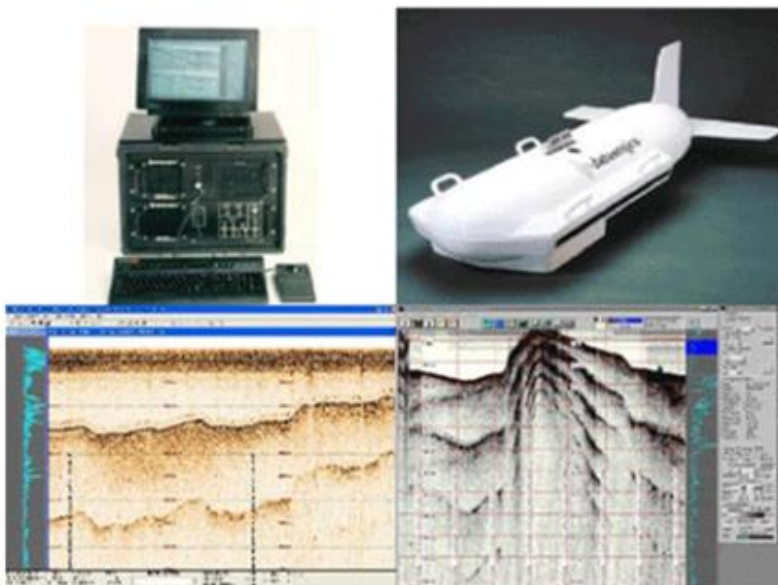### ◆ Coast Surveying

Precision bathymetric survey

It can be used in various fields such as designing port construction and dredging by measuring depth and topography of the sea floor using acoustic echo sounder and providing various types of three-dimensional image and undersea topography information.

Precision bathymetric survey

This explores the structure of the seafloor strata using geotechnical explorers, grasps the underlying ground suspicions and distribution patterns, and makes the best decisions for dredging construction, port construction, marine structure construction, seabed remediation, Support.

In addition, the measured data can be analyzed and processed by various types of information.

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Coastal Investigation Surveying
Hydrographic Surveying

◆ Coastal Investigation Surveying · Hydrographic Surveying

It is possible to utilize in diverse fields such as designing various harbor construction work and dredging and maintaining the route by surveying depth and topography of the sea floor using echo sounder and offering information about a tridimensional image and submarine topography in many fields.

Hydrographic Surveying

Profiler

Multibeam(MBES)

Echo sounder

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Oversea Business

◆ Oversea Business

-Cooperation development spatial information Cloud environment GIS solution - GeoViewer system (Nobel Co., Ltd.), Korea branch (exclusive sale)

-Exclusive sale of spatial information, digital photogrammetry system (DELTA), Scanner, Aerial Digital Camera

-Aerial shot, digital mapping, construction of spatial information DB, image processing, construction of control point system (horizontal, vertical)

Solution
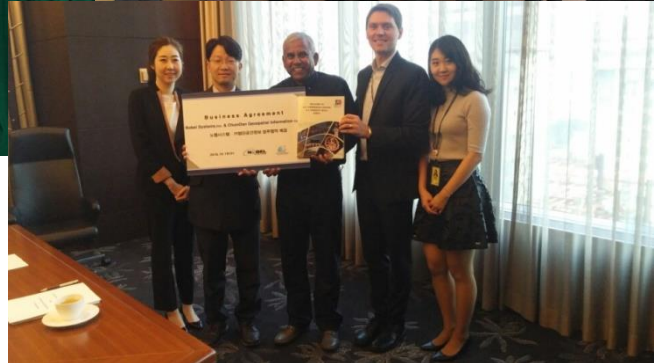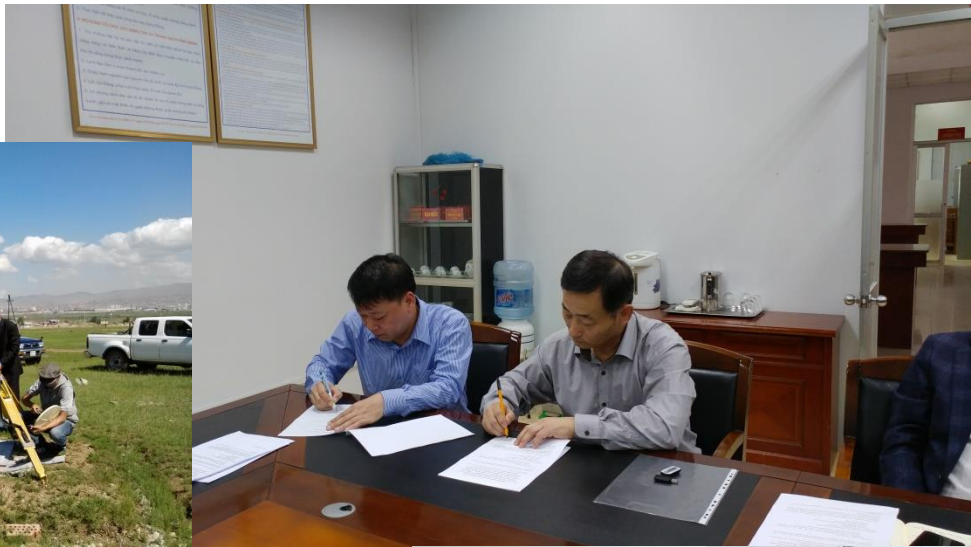
◆ Chumdan Map

Summary

- Diverse GIS data service such as various type of map data and satellite image.
- Effective and powerful data processing
- Web client and viewer program that show various types of data quickly
- Development of tool kit (SDK) that can produce GIS applied program of web or C/S environment.
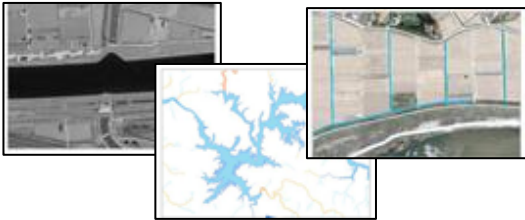
Functions

- View map (zoom in/out, move, layer city, etc.)
- Analysis function (bottom / peak city, distance / area / slope calculation, section analysis
- Vector analysis (Object creation/modification/deletion, highlighting, polygon mark)
- User convenient function (memo function, sign post function, general image mapping)
- Layer function (layer management on / off, legend function, scale division)
- Map output printing (storing screen, printing map)
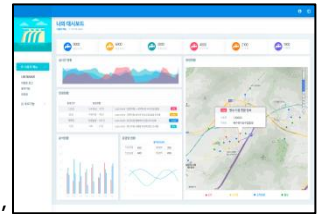
◆ Electronic field book

Summary

- It is composed of various tools that can cope with a field study quickly and easily at anytime and anywhere by conveniently carrying regardless of place, environment (weather, etc)

- Supporting digital map's regular position by offering functions that can look up, register, modify, delete diverse GIS data which is composed with various types of file format such as cad, shap, dwg, dxf, and et.

- It is possible to utilize with various tablets such as Galaxy Tap and iPad which are based on window environment and operate smoothly in mobile environment.

Functions

- Main functions (Symbol management, Building cycle management, read management)

- Additional functions (zoning, wall/bridge/retaining wall/stonework/dike)

- Other functions(Wacom writing recognition/selecting menu/moving map)

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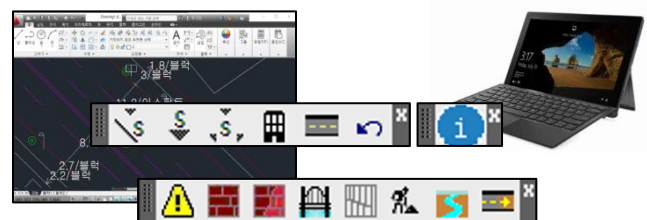
Digital Photogrammetric Station

◆ Delta

Digital Photogrammetric Station «Delta»

Provides creation/revision digital maps and orthophotos from raster images.

Hardware

The photogrammetric station is based on a standard Intel-compatible computer working on Windows 98/ME/2000/XP system. The software supports video modes from 1024x768xHiColor to 1600x1200xTrueColor.

Can work with stereoscope (split screen mode) or OpenGL 3D-shutters (page flipping mode).

The station provides a fixed floating mark and scrollable images in split-screen mode; this functionality does not require any special hardware support.

Users can move the floating mark with a classic handwheels/footdisk combination and/or with the mouse.

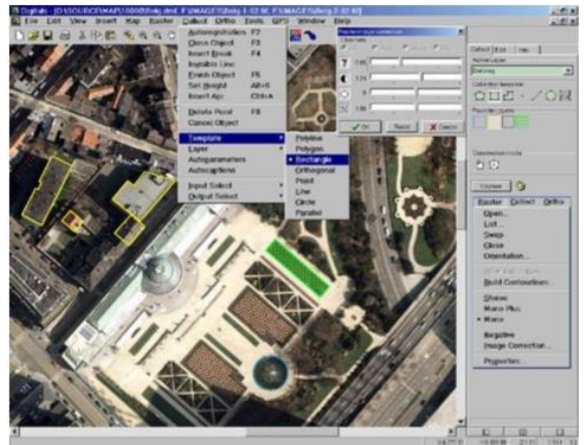Stereoscope or stereo shutter glasses can be used for observation.

One micron encoders and 3D digitize with subpixel accuracy.

Orientation program

Provides management of camera and ground point lists;

Semiautomatic orientation of single photos or stereo models;

Full error control and correction on each orientation stage;

Works with aerial and satellite images of central and panoramic projection;

Data collection over a stereo model or single photo

Mapping software

Works both with stereo models and with single photos using a DEM;

Data collection over a stereo model or single photo;

Can be used for digitalization of orthophotos or scanned maps;

Three-dimensional superimposition of vector data on raster images;

Automatic and semiautomatic DEM extraction, building and interpolation of contourlines;

Fully customized layers, symbols, object parameters and other map attributes;

Collection using templates of standard object types, automatic creation and addition of polygons;

Automatic snap to points/lines of existing objects in collection mode;

Works with black-and-white and color raster images up to 4Gb large on standard computers;

Supports popular vector formats: DXF+DBF, MID/MIF, Shape, DGN, DWG, ASCII;

Online coordinate exchange with other programs via TCP/IP or COM-port.