

Photogrammetry in Bentley CAD/GIS Environments

CAD-based systems have proven tremendously popular and play a leading role in modern photogrammetric production. Bentley® MicroStation® has emerged as the CAD system of choice for many users in the photogrammetric community. As Bentley Map and Bentley Map Enterprise have been introduced to the market, they've taken a place alongside MicroStation as a common component of many photogrammetry workflows.

PRO600 products are specially designed to optimize production-mapping for organizations that use Bentley

MicroStation, Bentley Map, and Bentley Map Enterprise. PRO600 CART enables 3D feature collection and editing in these environments, while PRO600 DTM provides a variety of tools for terrain modeling. Both PRO600 products use technology from our IMAGINE Photogrammetry product line, allowing CAD and GIS users to benefit from the robust, high-throughput capabilities that are trusted by mapping professionals worldwide.

PRO600 Products Features

- Seamless integration with the Bentley environment, reducing the learning curve and maximizing efficiency for novice and experienced Bentley users
- High-performance stereo viewing engine
- Sophisticated data collection and editing tools
- Support for a variety of input devices, including TopoMouse, Z/I Mouse, and more
- Tight integration with IMAGINE Photogrammetry

PRO600 CART

Feature collection and editing is central to photogrammetric production. For photogrammetry professionals, delivering geographic data to clients in a cost-effective, timely, and consistent manner is a top priority. Having the right software for feature collection and editing is vital to success.

PRO600 CART provides a set of cartographic presentation tools within your Bentley environment, including line patterning, polygon hatching, symbology, contour annotation, slope hachure, and manuscript grid placement. It also includes extensive feature-coding capabilities. Using PRO600 CART, you can also display imagery in both the Bentley product viewers and IMAGINE Photogrammetry stereo-based viewers, and even link the viewers so you can control and use them at the same time.



Key Features for PRO600 CART

- Symbology settings stored in a feature definition library
- Easy-to-edit feature definition library
- Multiple collection modes and tools to enhance productivity
- Parallel-line generation with up to 20 parallel lines simultaneously
- Button mapping for input devices
- Automatic periodic design file backup
- Undo and redo
- Ground control point utility that allows you to plot ground control points as annotated symbols
- Data editing, including contour rounding and centerline generation

PRO600 DTM

Providing a stereo editing environment and an advanced toolset for terrain modeling, PRO600 DTM enables you to dynamically update or edit your terrain files using the mensuration tools in the PRO600 DTM environment with the capturing capability in the stereo viewer.

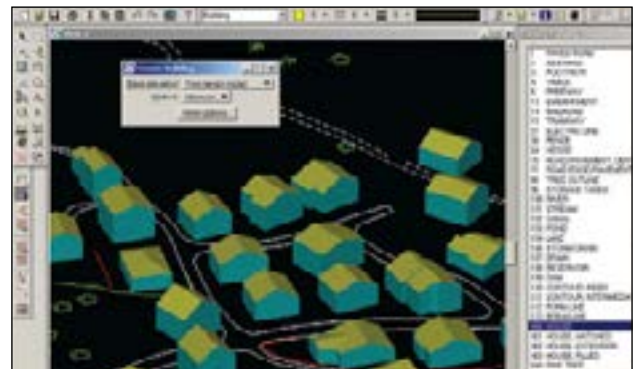
PRO600 DTM lets you import an IMAGINE Photogrammetry terrain dataset into your Bentley product. This enables you to merge MicroStation design file data into an IMAGINE Photogrammetry terrain dataset along with specifications about how the data is to be used (breaklines, polygon flattening, etc.). It also lets you interpolate continuously from an IMAGINE Photogrammetry terrain dataset, using the elevation as the active depth within the MicroStation view. You can also convert 2D design files into 3D by draping the vector data over an IMAGINE Photogrammetry dataset. PRO600 DTM requires PRO600 CART.



MicroStation design file graphics are displayed by PRO600 in full 3D stereo.



PRO600 features 3D feature extraction in a CAD environment.



PRO600 provides tools that aid the extraction of 3D building models from imagery.

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About GEOSYSTEMS

GEOSYSTEMS is a software vendor and service partner for geospatial solutions and helps public authorities, private companies and educational organizations to easily transform location-based data into actionable information. As Hexagon Geospatial platinum partner, GEOSYSTEMS offers not only leading-edge products for remote sensing, photogrammetry, GIS and data management, but also Hexagon Smart M.App solutions for easy-to-use dynamic map experiences. In addition, GEOSYSTEMS develops customized applications, implements tailor-made workflows and provides excellent trainings.

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About Hexagon

Hexagon is a global leader in sensor, software and autonomous solutions. We are putting data to work to boost efficiency, productivity, and quality across industrial, manufacturing, infrastructure, safety, and mobility applications. Our technologies are shaping urban and production ecosystems to become increasingly connected and autonomous — ensuring a scalable, sustainable future.

Hexagon's Geospatial division creates leading platforms, applications and solutions for visualizing, analyzing, and deriving insight from location data. By interconnecting the geospatial and operational worlds, we help customers of all sizes – from sites to cities to nations – use 5D location intelligence to solve real-world, mission-critical challenges.

From snapshots in time to real-time streams, our technology enables autonomous connected ecosystems that deliver reliable, repeatable location information. We shorten the loop from data acquisition to action, helping clarify what was, what is, what could be, what should be, and ultimately, what will be, so we can build a thriving, sustainable world.

Hexagon (Nasdaq Stockholm: HEXA B) has approximately 20,000 employees in 50 countries and net sales of approximately 4.3bn USD. Learn more at hexagon.com and follow us @HexagonAB.