"Bentley MicroStation and its discipline-specific applications have enabled our design team to achieve an unparalleled level of accuracy when compared to any other 3D design software."
—ARUP

Whether you want to rapidly produce beautiful, precise drawings, create 3D architectural or engineering models, or begin employing information-rich BIM workflows, MicroStation and MicroStation PowerDraft® can help you get the job done better, faster, and smarter.

Work Together Better

Since most projects involve many different specialists across the asset lifecycle, being more connected to others means less rework and more informed decisions so you can get things done right the first time. MicroStation is uniquely able to pull together multi-discipline teams and help them work as one with a project-centric approach. You can connect to integrated secure cloud services to share files, monitor project progress and submit deliverables, as well as leverage flexible referencing capabilities, standards management and checking capabilities, and receive personalized in-application recommendations about how to use the product better for your type of work on your type of project.

Rapidly Explore More Design Options

Unlike traditional CAD software, MicroStation is purpose-built to allow you to work in both CAD and BIM workflows. With support for 2D, 3D and hybrid 2D/3D workflows, and the ability to populate and manage an unlimited amount of associated information, MicroStation delivers the simplicity and productivity of CAD with the richness and power of BIM, including rich geometric constraints and a comprehensive set of solid, mesh, surface, and feature modeling capabilities.

Confidently Integrate Any Data Type

A hallmark of Bentley's technology is its unparalleled ability to open, import, reference, and export the widest available range of data formats and data types. With authentic RealDWG libraries licensed directly from Autodesk, you can reliably work with and produce drawings and models when working with others who use this format. With the ability to consume and produce multi-discipline design information from 83 raster formats, 37 vector formats, 17 point cloud formats as well as common GIS formats like SHP files, you can work with and for anyone without limitations.

Design Within Real-world Context

Communicating your design intent or evaluating a design in the context of where it is in relation to the real world has never been easier with support for aerial/satellite imagery, point clouds, and reality meshes produced from digital photos of a site using Bentley's leading ContextCapture software. Save time and eliminate error-prone manual work with the ability to model within the context of precise existing conditions.
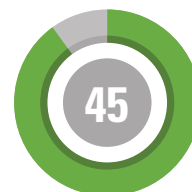
Improve Project Deliverables

You can automate production of high-quality drawings, including multi-discipline documentation sets, that are consistent across an entire project. When it comes to documentation, the ability to leverage embedded properties and BIM information is unique to MicroStation and PowerDraft—their powerful documentation automation capabilities are huge time savers and a bridge to leveraging BIM models for deliverable production. The advantages span from property-driven annotation, display, and reports to sheet layout and indexing.

Leading Firms Depend on MicroStation

MicroStation and MicroStation PowerDraft are widely used by top design firms.

*Combined 2017 ENR Top 500 Design Firms and ENR Top 150 Global Design Firms with duplicates removed

ENR Top 50 Design Firms

45

*Combining ENR's Top 500 Design Firms**

346

"MicroStation allows our entire planning team to efficiently collaborate on large models thanks to its flexible referencing capabilities and its intuitive and customizable user interface. In addition, its 3D modeling capabilities help us to present our architectural ideas quickly and professionally."
—Störmer Murphy and Partners

Design in Context

Geocoordination	MicroStation	PowerDraft	AutoCAD	AutoCAD LT
Integrate Google Earth content	●	●	●	●
Employ geospatial referencing using multiple coordinate systems	●	●	○	○
Perform simple AEC coordinate transformation for buildings	●	●	○	○
Integrate with OGC Web Map Server	●	●	○	○
Reference Geospatial PDFs	●	●	○	○
Link real-time GPS data to models	●	○	○	○
Use of 2D and 3D Imagery				
Integrate 83 raster image formats	●	●	◐	◐
Easily integrate hundreds of geospatial coordinate systems	●	●	◐	◐
Integrate engineering-ready phototextured reality meshes created from photos	●	●	◐	○
View and manipulate point-cloud data in 14 popular formats without translation	●	●	◐	○
Incorporate geospatial data into reality meshes to perform visual queries and data visualizations	●	●	○	○
Support for point cloud and reality mesh streaming services	●	●	○	○

Design with True 3D Parametric Modeling

Parametric Modeling	MicroStation	PowerDraft	AutoCAD	AutoCAD LT
Intuitively push, pull, drag, cut, and extrude 3D geometry	●	○	●	○
Create parametric solids, surfaces, meshes, and feature models	●	○	◐	○
Create and apply persistent geometric constraints to 2D and 3D geometry using complex expressions	●	◐	◐	○
Build parametric objects with predefined variants to more easily find and manage components	●	○	◐	○

Create Project Deliverables

Printing and Plotting	MicroStation	PowerDraft	AutoCAD	AutoCAD LT
Create, manage, and navigate plot sets	●	●	●	●
Batch print multiple drawings	●	●	●	○
Control print settings using print styles	●	●	○	○
Publish intelligent 2D/3D PDFs using genuine Adobe PDF tools	●	●	○	○
Leverage properties and BIM information to automate creation and updating of annotation	●	●	◐	◐
Create sheet indexes from sheet properties and build rules-based indexes	●	●	●	●

Enforce Standards

Standards Management	MicroStation	PowerDraft	AutoCAD	AutoCAD LT
Manage CAD standards with configurable checking tools	●	●	●	●
Easily manage all styles for dimensions, text, lines, detail symbols, and display	●	●	○	○
Automate standards-driven drawing composition	●	●	○	○
Integrate CAD standards using templates	●	●	○	○
Automate standards enforcement with cloud-based project standards sharing	●	●	○	○

"Bentley's commitment to the same file format over several versions has been and will continue to be the main benefit over the competitors."
—GeoSite.dk

	MicroStation	PowerDraft	AutoCAD	AutoCAD LT
Change Management				
Confirm status and approvals using digital signatures	●	●	●	●
Record all changes to designs for rich revision control	●	●	○	○
Roll back any design file changes from any work session	●	●	○	○
Compare and plot design file changes	●	●	○	○
Control digital rights to view, edit, print, and copy file content	●	●	○	○
Establish predefined expiration dates for design files	●	●	○	○
Lay Out and Annotate Drawings				
Drawing Production				
Update all annotation dynamically	●	●	●	○
Manage drawing views across an entire project	●	●	●	○
Drag and drop plans, elevations, and sections to create documentation	●	●	◐	○
Slice and filter 3D models to improve interactive visualization	●	●	◐	○
Update drawings automatically when 3D models change	●	●	○	○
Coordinate 3D models and 2D drawings automatically	●	●	○	○
Production Drafting				
Employ a comprehensive set of drafting and detailing tools	●	●	●	●
Speed production with intelligent and interactive snapping	●	●	●	●
Use dynamic input with heads-up display	●	●	●	●
Navigate intuitively with element transparency, display priority, and gradient fills	●	●	○	○
Produce Animations and Renderings				
Integrated Visualization Capabilities				
Render in near-real-time with photo-realistic rendering	●	○	◐	○
Use point-and-shoot physically correct materials and lighting libraries	●	○	○	○
Access rich online photorealistic content (RPC)	●	○	○	○
Employ distributed/networked rendering	●	○	○	○
Produce realistic animations quickly	●	○	○	○
Use keyframe and time-based animation	●	○	○	○
Preview live on-screen animations	●	○	○	○
Manipulate animations through timeline and velocity graph	●	○	○	○
Simulate traffic with built-in workflows	●	○	○	○
Direct integration with real-time visualization and rich delivered library of environmental content	●	○	○	○
Stereoscoping VR rendering	●	○	○	○
Visualize and Analyze Designs				
Perform real-time visual analysis based on object properties (height, slope, aspect angle, etc.)	●	●	○	○
Access and analyze model data via ODBC driver	●	●	○	○
Perform solar exposure/shading analysis	●	○	○	○

Work Collaboratively on Designs

	MicroStation	PowerDraft	AutoCAD	AutoCAD LT
Design Review				
Create rich, multi-discipline models for design review	●	●	◐	◐
Consume and coordinate electronic design reviews	●	●	◐	◐
Review and mark up designs with redline comments using cloud services	●	●	○	○
Manage markups and review workflows with cloud-based markup dashboard	●	●	○	○
Resolve issues across entire project team with cloud-based issue resolution services	●	●	○	○
File Referencing				
Attach PDF files natively as a reference	●	●	●	●
Reference live 2D/3D DGN, DWG, and large image files, refreshable on demand	●	●	◐	◐
Attach versioned files including design history	●	●	○	○
Navigate through file history	●	●	○	○
Format Interoperability				
Use and produce trusted DWGs with Autodesk® RealDWG™	●	●	●	●
Access geometry requiring object enablers	●	●	●	●
Integrate CAD data in many formats: DGN, DWG, DXF, PDF/U3D, IFC, Rhino 3DM, STL, VRML World, SketchUp SKP	●	●	◐	◐
Import mechanical CAD formats including JT, IGES, Parasolid, ACIS SAT, CGM, STEP AP203/AP214	●	◐	●	○
Import, open, and reference IFC files	●	●	●	○
Access visualization file formats like 3DS, OBJ, Collada, FBX	●	◐	◐	○
Incorporate geospatial file formats like Google Earth KML, Esri SHP files and geospatial PDF	●	●	○	○
Import Revit RFA content	●	●	○	○
Batch convert multiple formats	●	○	○	○
Project Collaboration				
Integration with collaboration service for global worksharing and streamlining the design process	●	●	◐	○
Cloud-based project standards sharing	●	●	○	○

Work in a Personalized Environment

	MicroStation	PowerDraft	AutoCAD	AutoCAD LT
Group tools and tasks and customize interface	●	●	◐	◐
Employ universal database connection	●	●	●	○
Create user-defined macros	●	◐	●	○
Develop applications with Microsoft (VBA) .NET, C++, C#, and the application's own development language	●	◐	●	○
Create customizable cursor menus	●	●	◐	○
Personalized in-application learning and feature recommendations	●	●	○	○

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