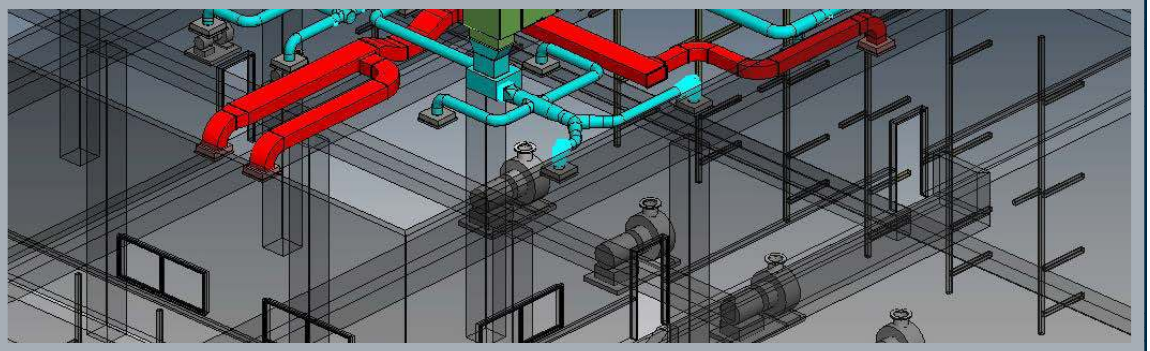
PRODUCT DATA SHEET



AutoPLANT Modeler

Comprehensive AutoCAD-based Plant Design and Modeling Suite

AutoPLANT Modeler is a spec-driven, advanced 3D plant design and modeling application. AutoPLANT Modeler creates intelligent piping, equipment, raceways, and isometrics in one application. It is easy to use, customize, and administer, providing interactive routing and placement in an intelligent 3D multi-discipline environment.

3D Modeling Enhances Quality and Productivity

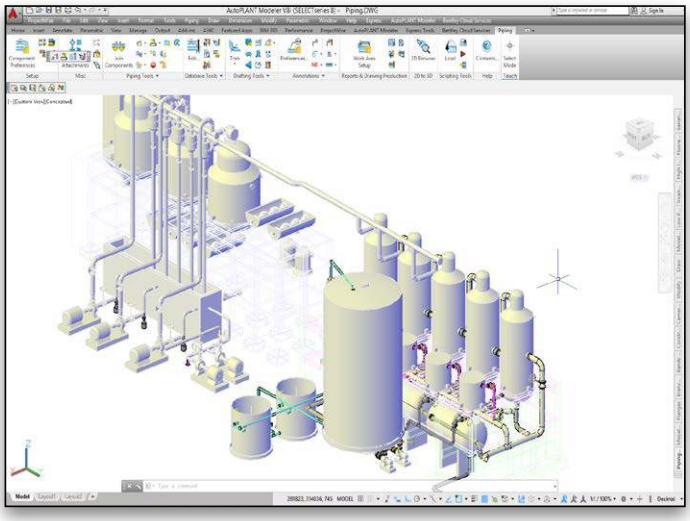
AutoPLANT Modeler models intelligent plant components in a powerful 3D environment. Piping components, equipment, raceways, and drawing-controlled data are dynamically linked to a shared project database, minimizing errors and rework. The shared connection to the project database can be used to modify and revise the component data or generate project reports and deliverables. Component placement is intuitive, and common repetitive tasks are automated. Whether placing piping or raceways in congested plant areas or creating equipment spaced over large areas, automatic placement and orientation maximize productivity. AutoPLANT has always been easy to administer and operate with Project Administrator and other capabilities that make creating and configuring projects easy and fast.

2D Orthographic Drawings

AutoPLANT Modeler produces 2D orthographic drawings including single- or double-line with visible centerlines. AutoPLANT Modeler supports the creation of orthographic drawings using paper-space viewports and the export of a 3D model to produce finished drawings. Drawing Flattener tool produces flat, two-dimensional drawings including elevations, plans, and sections from the 3D model.

Automatic Piping Isometrics with OpenPlant Isometrics Manager

AutoPLANT Modeler is fully integrated with OpenPlant Isometrics Manager. This enables engineers or other supporting project personnel to automatically create isometric drawings with dimensional, annotation, and title block data in RealDWG format. By managing isometric production through project-based rules, the application provides users with a way to easily generate isometrics from AutoPLANT Modeler or directly from the project database using a simplified interface. The isometric produced by OpenPlant Isometrics Manager is intelligent, including both graphics and associated piping data. This allows users to search and query data within these documents without having direct access to the piping model. Integration with ProjectWise allows finalized isometrics to be posted directly to the document repository with automatic version control.



Piping modeling through AutoPLANT Modeler

AutoPLANT and Bentley Navigator Leverage Dynamic Collaboration for Improved Results

Bentley Navigator allows viewing, analyzing, and augmenting of data in a tightly integrated project environment. Reviewers can use Bentley Navigator to mark up a model and send comments directly back to the designer to review in AutoPLANT Modeler – providing increased accuracy and speed in the design review cycle. Designers gain an added advantage by syncing an AutoPLANT Modeler view with Bentley Navigator to see piping, equipment, and raceway components within the context of the full plant model. This enables them to find and resolve more clashes and optimize layout to save time and money during construction.

Software Integration Provides Information Mobility

AutoPLANT Modeler works seamlessly with other Bentley plant design and data management applications via the shared plant project database. The 3D piping model can be integrated with 2D data using Bentley Datasheets, OpenPlant PID, Bentley Data Manager, or Bentley Instrumentation and Wiring. Powerful validation capabilities verify the consistency and completeness of the piping design and the PID. Integrating the Bentley plant project database with plant and business systems makes the most of valuable information investments. AutoPLANT Modeler can be integrated with ProjectWise to ensure information mobility with integrity.

System Requirements

Software
AutoCAD 2016 (64 bit), Microsoft Office 2013 / 2010 Professional (32 or 64 bit), Microsoft SQL Server 2014 / 2012 / 2008 R2 Enterprise Edition, ORACLE 11g Release 2 (v11.2.0.3) / ORACLE 12c Release 1 (v12.1.0.2)

Processor
Intel Core i7, Intel Xeon, AMD Phenom, or AMD Opteron Operating System

Operating System
Microsoft Windows 10 / Windows 8.1 / Windows 7 (64-bit) Enterprise, Professional or Ultimate Edition

Memory
8 GB (minimum) for Microsoft Windows 7 (64-bit)

Disk Space
2 GB available complete installation)

Graphics Card
1 GB Microsoft Direct3D-capable workstation-class graphics card

Find out about Bentley at: www.bentley.com

Contact Bentley
1-800-BENTLEY (1-800-236-8539)
Outside the US +1 610-458-5000

Global Office Listings
www.bentley.com/contact

AutoPLANT Modeler At-A-Glance

Modeler Features
- Manage project configurations through a highly intuitive graphical user interface
- Produce intelligent isometrics via OpenPlant Isometrics Manager
- Exchange and review read-only, open design data via the Bentley i-model format
- Use Bentley Navigator for design review, interference detection, schedule simulation, and more
- Manage project design data and drawings via integration with ProjectWise
- Place items defined in OpenPlant PID in AutoPLANT Modeler using the 2D/3D interface
- Customize AutoPLANT to meet project needs via component class editor and script editor
- Save IT time and resources by scripting AutoPLANT install

Piping Features
- Use flexible placement and routing through Advanced Routing
- Updates to component Sizes and Specs through Change Size/ Change Specs
- Use standard AutoCAD commands (move, stretch, copy, and more)
- Quickly find component using the modular menu that groups components together by type (jacketed pipes, HVAC, cable tray, conduit, instruments, plastic piping, ductile iron, high purity, and tubing)
- Use flexible placement and routing features
- Insert items into an existing pipe segment
- Create and insert piping assemblies
- Use multiple piping modules (ductile iron, high purity, plastic pipe, lined pipe and Victaulic components, HVAC, conduit, instrument, and jacketed piping)
- Access over 100 component catalogs, with example specs included
- Use SpecGen to quickly create custom specs from scratch or from shipped catalogs
- Save and restore groups of reference drawings (Xrefs)
- Save and restore section views for ease of design or drawing production
- Annotate in paper space or model space
- Select any property or field using powerful querying tools
- Generate project reports from any project model
- Place bills of material directly on any drawing
- Generate accurate quantities for components (including pipe cut-lengths)
- Report to HTML, spreadsheets, documents, and data sources
- Complete customization of reports and bills of material

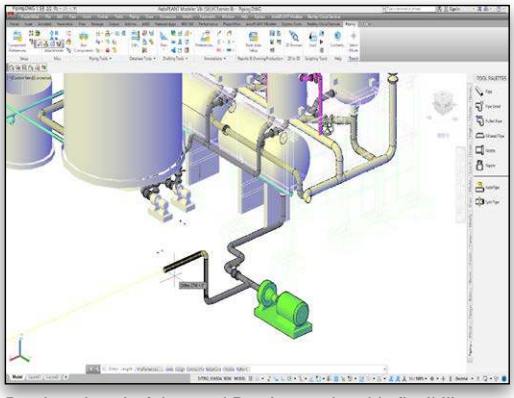
Equipment Features
- Parametric equipment and intelligent nozzle design
- Standard equipment types: pumps, vessels, and exchangers
- Custom equipment can be created from solid primitive shapes
- User-defined equipment can be created to take advantage of vendor accuracy

Raceways Features
- Model intelligent raceways, cable tray, and conduit
- Use powerful routing capabilities to allow concurrent engineering with piping, structural, and HVAC disciplines
- Use Bentley Interference Manager at any point in the design process

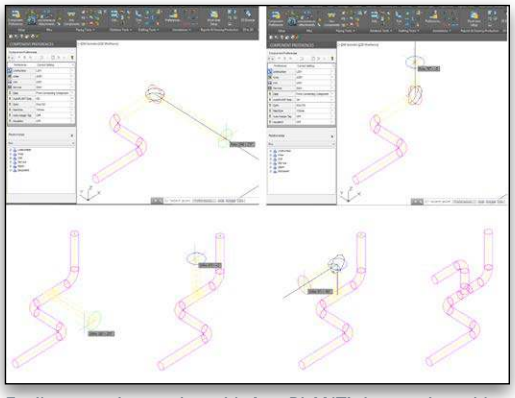
OpenPlant Isometrics Manager Features
- Easy-to-use interface designed for non-piping users; no need to understand cryptic switches, auxiliary file structures, or settings
- Project-driven drawing output and bills-of-material definitions
- PCF files can be used to pass data to existing fabrication systems
- Isometrics can be created in RealDWG format
- Element information, specific components, or sets of components can be easily browsed
- Isometric production can be separated from design applications by running isometrics directly from project database
- Easy-to-configure isometrics styles; no more switches to remember
- User-configurable drawing layouts and reporting
- Customized drawing attributes for additional pipeline information
- Fully configurable bills-of-material layout

Synchronized Design with AutoPLANT Modeler and Bentley Navigator
- View components changed in AutoPLANT Modeler from Bentley Navigator with one click
- Zoom, pan, and orbit in either application and then push the view to the other
- Easy, quick, real-time review of intelligent models (images and tags)
- Quick visualization, schedule simulation, and dynamic animation
- Link models with ODBC-compliant schedule, construction, and other databases

Bentley CONNECT Services Support
- Allows users to register their projects with Bentley for project-centric analysis
- Facilitates user access to personal Learn material, paths and history, timely product related news, automatic product updates and notifications, and accurate tracking of time spent against products and projects
- Helps keep track of everything you and your team members do within that project
- Provides a universal common ID to link together all activity within a project



Routing pipes in Advanced Routing mode adds flexibility to component placement.



Easily create isometrics with AutoPLANT's integration with OpenPlant Isometrics Manager.

Bentley
Advancing Infrastructure