AutoPLANT® Equipment V8® (SELECTseries 4)
AutoCAD-based 3D Parametric Plant Equipment Modeling

AutoPLANT® Equipment V8® enables quick and accurate 3D modeling of intelligent plant equipment, nozzles, ladders, platforms, and walkways. Complex custom plant equipment can be easily modeled from primitives.

**Parametric Equipment Design**
With AutoPLANT Equipment V8®, users can model plant equipment parametrically. Dialog boxes are presented with graphical representations of the equipment, along with data fields for each design criteria, enabling users to precisely model the equipment. As the plant design evolves or changes, updates can be applied to the design parameters and the 3D equipment will be graphically updated automatically.

**Standard Equipment Types**
AutoPLANT Equipment V8® includes a wide range of standard plant equipment types such as pumps, vessels, and exchangers. Equipment can be selected from menus, palettes, or toolbars within AutoPLANT Equipment V8® and placed at defined locations, or relative to global reference points.

**Custom Equipment From Primitives**
Easily create custom equipment from intelligent primitives. Placing an equipment primitive defines the parent component, while attaching associative primitives defines the child components. Constructing equipment assemblies in this manner is similar to attaching nozzles to equipment. By modifying the vessel's dimensional parameters, the nozzles will move accordingly. Similarly, modifying the parent primitive of an equipment assembly appropriately moves or sizes the child primitives.

**User Defined Equipment**
AutoPLANT Equipment V8® enables users to create plant equipment components from one or more existing AutoCAD or AutoPLANT Equipment entities in a drawing. These entities can be anything from an AutoCAD solid primitive to a complex component, such as a block or custom object. The user-defined equipment option brings legacy and other third-party equipment components into the intelligent AutoPLANT Equipment V8® environment.

**Intelligent Nozzles**
AutoPLANT Equipment V8® provides a variety of options for placing and orienting nozzles using parametric information from external database specifications. Once a nozzle is placed on the equipment, the intelligence becomes available within AutoPLANT Piping V8®. With AutoPLANT Piping V8®, the user connects the piping components to the nozzles then, the pipe size, pipe spec, rating, facing, and line number are automatically carried over to the connecting piping component.

**AutoPLANT and Navigator Speed Design While Improving Results**
Bentley Navigator supports a tightly integrated project environment. The ability to distribute early 3D models to multiple stakeholders, have those team members dynamically mark-up edits, changes, etc., and feed that information back to the designer in an accurate and timely manner is critical to project success. Because Bentley’s models are intelligent, all tag information is shared between the two applications, so Bentley Navigator users can select a component and see all details the designer has defined. Reviewers can use Bentley Navigator to mark up a model and send comments directly back to the designer to review in AutoPLANT Equipment – providing an extra level of design review and an increase in project speed and accuracy.

Designers gain an added advantage with AutoPLANT Equipment and Bentley Navigator. They can sync an AutoPLANT Equipment view to Bentley Navigator to see piping within the context of the full plant model, finding and resolving more clashes and optimizing layout to save time and money during construction.

**Software Integration Streamlines Workflows**
AutoPLANT Equipment V8® works seamlessly with other Bentley plant design and data management applications via the common, shared plant project database. The 3D piping model is automatically integrated with the schematic 2D data created using Bentley Datasheets, AutoPLANT P&ID, Bentley Data Manager, or Bentley Instrumentation an Wiring. Powerful validation tools verify the consistency and completeness of the piping design compared to the P&ID. Integration of the Bentley plant project database with plant and business systems makes the most of valuable information investments.
AutoPLANT Equipment V8i At-A-Glance

Parametric
- Models equipment using parametric information
- Provides a dialog-based GUI for equipment design
- Uses dimensional changes to automatically update the model

Reporting
- Produce pre-defined reports including equipment lists and nozzle take-offs
- Create custom reports to group and sort equipment and nozzle data stored in the plant project database

Positioning Location Points
- Define location points for positioning plant equipment
- Relocate equipment automatically based on modified location points
- Position equipment via location points or global reference points

Predefined Plant Equipment
- Includes predefined, commonly used plant equipment types
- Includes material handling equipment such as conveyors and bucket elevators
- Includes specialized pumps for the water and wastewater industries plus RO reactors for pharmaceutical and biotech industries

Spec-driven Pumps
- Store standard pump parameters in a Microsoft Access database
- Enter new pump data into the spec to re-use when a similar pump is required

Project Flexibility
- Create individual equipment models outside of the project environment
- Build a project from individual equipment models
- Restore individual equipment models from backups
- Move equipment models between projects
- Work on project models when disconnected from the project

Editing Equipment
- Update equipment automatically when a design parameter is changed
- Update equipment automatically when the sizes of primitives or predefined scripts are changed

Synchronize AutoPLANT and Bentley Navigator
- View components changed in AutoPLANT 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)

Synchronized views in AutoPLANT Equipment and Bentley Navigator improve the review process.