

BENTLEY® AUTOPLANT® EQUIPMENT

Object-based 3D equipment modeling

Bentley® AutoPLANT® Equipment 2004 Edition provides the user with a powerful 3D application for fast layout and design of intelligent vessels, nozzles, and equipment drawings. The product is shipped complete with comprehensive pre-built equipment libraries. Complex custom components are easily modeled from intelligent equipment primitives.

AutoPLANT solutions provide state-of-the-art 3D modeling capabilities previously unavailable in any AutoCAD-based plant design and modeling package, and this is particularly evident in AutoPLANT Equipment. The 3D engine for AutoPLANT is written exclusively with advanced ARX technology, allowing you to take advantage of new and advanced modeling methods available with AutoCAD ObjectARX technology.

Parametric Equipment

AutoPLANT Equipment lets you model using parametric information. Dialogs are presented with graphical representations of the equipment, along with data fields for each critical parameter, allowing you to draw equipment with a great deal of precision.

Standard Equipment Shapes

The AutoPLANT Equipment module includes a wide range of standard equipment shapes such as pumps, vessels, and exchangers. By selecting from the pull-down menus or toolbar, entities are quickly placed by defined points or relative to global reference points.

Custom Equipment

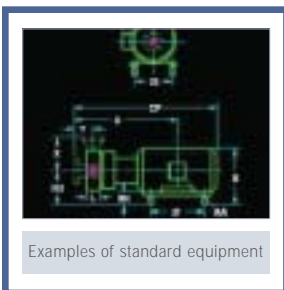
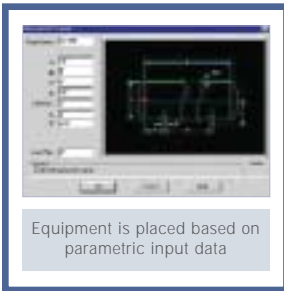
Custom equipment is easily built from intelligent primitives. Placing an equipment primitive defines the master or parent component, while attaching associative primitives defines the slave or child components. Constructing equipment assemblies this way is like attaching nozzles to equipment; if you modify the vessel's dimensional parameters, the nozzles will move accordingly. Similarly, if you modify the parent primitive of an equipment assembly, the child primitives will be moved or sized accordingly.

User-defined Equipment

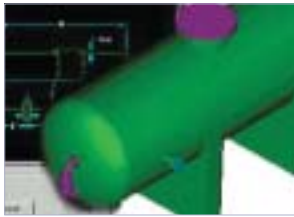
The Equipment/User-defined option displays a dialog for creating a special type of equipment component from one or more existing AutoCAD or AutoPLANT Equipment entities in a drawing. These entities can be anything from an AutoCAD primitive, such as a line or circle, to a complex component, such as a block or custom object. The Equipment/User-defined lets you bring legacy and other third-party equipment components into the AutoPLANT Equipment environment.

Intelligent Nozzles

AutoPLANT Equipment provides a variety of options for placing and orienting nozzles. First, nozzles are placed using parametric information from external database specifications. Once the nozzle is placed on the equipment, the intelligence becomes available to the AutoPLANT Piping application. With AutoPLANT Piping, the user connects a piping component to the nozzle, the size, spec, rating, facing, or line number is carried over to the connecting piping fitting.



BENTLEY AUTOPLANT EQUIPMENT AT-A-GLANCE



Intelligent Nozzle



AutoPLANT Model

Reporting

- Pre-formatted report types include Equipment List and Nozzle Takeoff
- Creation of custom reports that group and sort equipment and nozzles according to any data stored in the AutoPLANT Equipment database

Location Points

- Definition of location points for locating various pieces of equipment
- Automatic moving of location point and all associated equipment

Pre-defined Specialized Equipment

- Pre-defined pieces of equipment commonly used in the oil and gas industry
- Ability to specify equipment types
- Inclusion of material handling equipment, such as conveyers and bucket elevators
- Specialized pumps for the water/waste-water industry, and RO reactors for pharmaceutical/biotech industries

Spec-driven Pumps

- Standard pump parameters supplied in a Microsoft Access database
- Ability to enter unavailable size pump data into the spec once and re-use it whenever a similar pump is needed

Equipment Editing

- Automatic adjustment of attached objects when a parameter is changed
- Automatic adjustment of attached items when diameters of primitives or pre-defined scripts are changed

SYSTEM REQUIREMENTS

- Processor: Intel Pentium 500 MHz or greater
- Operating System: Windows NT4, 2000 SP4, XP Pro
- Software: AutoCAD 2000, 2000i, 2002, 2004
- Memory: 256 MB (Typically more results in better performance)
- Disk Space: 1.5 GB

ABOUT BENTLEY

Bentley Systems, Incorporated provides software for the lifecycle of the world's infrastructure. The company's comprehensive portfolio for the building, plant, civil, and geospatial vertical markets spans architecture, engineering, construction (AEC) and operations. With 2003 revenues reaching \$260 million, Bentley is the leading provider of AEC software to the Engineering News-Record Design 500 and major owner-operators.

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