

Bentley Instrumentation and Wiring V8i (SELECTseries 7)

An Intuitive, Powerful Tool for Process Plant Control System Design

Bentley Instrumentation and Wiring is for creating project instrumentation loop diagrams, panel termination diagrams, motor schematics, single-line diagrams, and foundation fieldbus segment diagrams. Datasheets, hookups and specification sheets can be generated, accessed and managed through respective modules available with Bentley Instrumentation and Wiring. Developed by experienced instrumentation engineers, Bentley Instrumentation and Wiring is the ideal tool for EPC engineers and designers, as well as owner-operators.

Intuitive Connection Interface

By combining an intuitive drag-and-drop graphical interface with a fully integrated relational database, users can efficiently manage instrumentation, electrical and fieldbus data. The Layout Designer interface provides an intuitive drag, drop, and right-click interface for modeling all project cable and wiring connections. Components such as instruments, motors, cables, and panels can be dragged onto layouts and the connections modeled via right-click menu options. Layouts may show all instruments in a project or may be broken down into individual loops, areas, or processes. The same components may also be displayed on multiple layouts. Layouts can be printed to a PDF to create simple block cable diagrams.

Fast, Accurate, User-friendly Data Entry

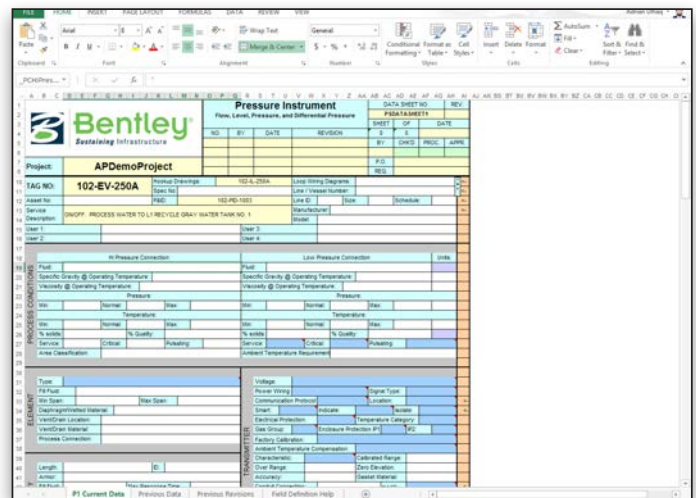
The standard interface of Bentley Instrumentation and Wiring is user friendly, with menu-driven, context-sensitive online help. SQL based views allow users to create pick lists for any cell in a view, reducing data-entry errors and ensuring consistency. The filter, sort, find, and replace commands provide quick access to project data, while the property sheet allows users to quickly update multiple records.

Multiple Reporting Capabilities

Bentley Instrumentation and Wiring includes many predefined reports. Users can easily edit these to meet project format requirements, or can simply add new reports. The built-in reporting engine quickly generates instrument, cable, termination, I/O, motor, and other essential project specific reports.

Multiple Drawing Types and File Formats

The software's built-in drawing engine allows users to generate drawings for instrument loops, fieldbus segments, panels, and motors. These drawings can be automatic quick connection drawings in PDF format, or CAD files utilizing the AutoGen, Composite and Template drawing creation functionality within Bentley Instrumentation and Wiring. The software utilizes an independent graphics engine to generate drawings in a DGN, DWG, or DXF format.



Generate datasheets with Bentley Datasheets from inside of Bentley Instrumentation and Wiring or Data Manager.

Standards Libraries Speed Project Design

Users can save significant design time by storing recurring designs as project standards. A common loop configuration that is repeated many times on a project can be designed and then saved as a project standard. The use of project standards applies to loops, segments, motors, and panels as well as individual terminal strips and devices. Standards are project specific, but users can select a standard created in a different project.

Easy Creation and Management of Hookups

Process and pneumatic instrument hookups – or installation details – can be created from Bentley Instrumentation and Wiring via the Bentley Hookups module. Hookup sheets are created in Microsoft Excel and from these, bills of materials for installation can be created for individual or multiple hookups. The module uses Microsoft Excel as its native format for deliverables and customization.

Automatic Datasheet and Specification Sheet Creation

Datasheets and specification sheets can be created from Bentley Instrumentation and Wiring using Bentley Datasheets and Specification Sheets modules, respectively. These are created in Microsoft Excel format and synchronization with the project database is automatic to ensure data consistency.

Datasheet creation through Bentley Instrumentation and Wiring and Bentley Data Manager in a ProjectWise-enabled AutoPLANT project is now supported to use defined Document Code.

System Requirements

Software

AutoCAD 2015 (64 bit), Microsoft Office 2013 / 2010 Professional (32 or 64 bit), Microsoft SQL Server 2012 / 2008 R2 Enterprise Edition, ORACLE 11g Release 2 (v11.2.0.3)

Processor

Intel Core i7, Intel Xeon, AMD Phenom, or AMD Opteron

Operating System

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

Memory

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

Graphics Card

1 GB Microsoft Direct3D-capable workstation-class graphics card

Disk Space

2 GB available

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

Bentley Instrumentation and Wiring V8i At-A-Glance

Integrated Database

- Shares data with other Bentley plant applications via the plant project database
- Supports Microsoft Access, SQL Server Express, SQL Server, and Oracle
- Provides field-level user access control
- Provides seamless data flow between functional and physical design solutions
- Access to all instrumentation and electrical data used by instrumentation and electrical designers and engineers
- Creates plant control system design deliverables
- Ensures consistent and up-to-date data
- Provides instant updates
- Automate tasks with Microsoft Access macros
- Create catalog tables for parts

User-friendly Interface

- Features right-click data manipulation
- Sort, filter, find, and replace data
- Add, edit, and delete tags
- Performs multiple tag updates with drag-and-drop and right-click graphical interface for modeling connections

Customizable Views

- Use out-of-the-box multi-discipline customizable views
- Create new project-specific views
- Create SQL-based catalog table pick lists
- Reference data from external sources
- Manipulate all project data
- Uses Microsoft Access query engine

Project Standards

- Create standards for loop, segment, motor, panel, I/O panel, terminal strips, and devices
- Batch create loops from standards
- Use standards from legacy projects
- Shares standard between multiple projects

Multiple Deliverable Types and Formats

- Loop, segment, panel, and I/O card termination drawings
- Motor schematic, termination, and single-line drawings
- DGN, DWG, DXF, and PDF drawing deliverables
- Automatic connection drawings

- AutoGen CAD drawings, template-based CAD drawings and composite CAD drawings (part AutoGen, part template)
- Reports in PDF format
- Datasheets and hookups in XLS or XLSX format
- Check in/out via ProjectWise V8i

Import and Export Data

- Import legacy data at project start-up
- Import and export data to and from third-party applications
- Supports MDB, XLS (X), TXT, DBF formats and ODBC data sources
- Export via user-defined views to control the exported data
- Import data from FEED solutions

Quick Report Generation

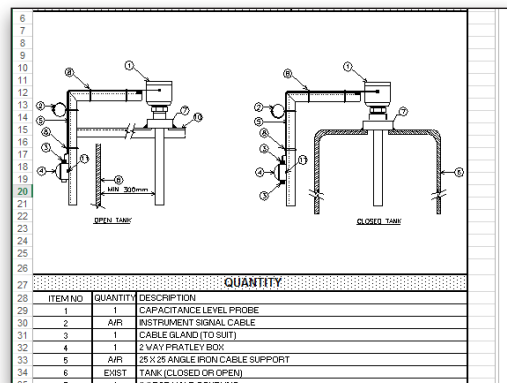
- Use out-of-the-box multi-discipline reports
- Customize all out-of-the-box reports
- Create new project-specific reports
- Reference data from external sources

Use of Microsoft Access reporting engine Datasheets / Specification Sheets

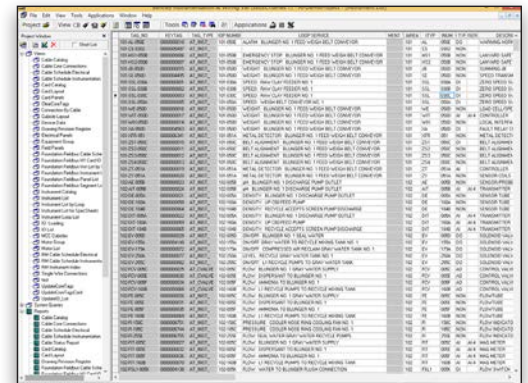
- Creates process, mechanical, instrument, and electrical datasheets and specification sheets
- Features bulk datasheet creation
- Syncs automatically with project database
- Update via database or datasheet
- Provide third-party updates via Excel
- Synchronizes third-party updates with database
- User control over data synchronization
- Offers single- or multi-tag datasheets
- Changes highlighted on datasheet
- Datasheet creation directly from inside of ProjectWise through Document Code.
- Seamless check in/out via ProjectWise V8i

Hookups

- Integrates with Bentley Hookups V8i
- Creates process or pneumatic instrument hookups
- Syncs automatically with plant project databases
- Generates installation bill of materials
- Check in/out via ProjectWise V8i



Generate hookups with Bentley Hookups from inside Bentley Instrumentation and Wiring or Data Manager.



Views and reports in Bentley Instrumentation and Wiring