

# CADWorx

**Product:** CADWorx Plant: 2018 (18.00.00)  
CADWorx P&ID: 2018 (18.00.00)  
CADWorx Equipment: 2018 (18.00.00)  
CADWorx Design Review: 2018 (18.00.00)

**Description:** CADWorx Plant Design Suite is an integrated and complete software series for plant design that provides intelligent drawing/database connectivity, advanced levels of automation, and easy-to-use drafting tools. The comprehensive series of design tools includes equipment, process and instrument diagrams, and design review, plus automatic isometrics and bills of material.

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## System Requirements

### AutoCAD

CADWorx is compatible with the following AutoCAD versions:

- AutoCAD 2018 (64 bit)
- AutoCAD 2017 (64 bit)
- AutoCAD 2016 (64 bit)
- AutoCAD 2015 (64 bit)

CADWorx is compatible with the following Autodesk vertical products (2018-2015):

- AutoCAD Mechanical
- AutoCAD Electrical
- AutoCAD Architecture
- AutoCAD MEP
- AutoCAD Civil 3D
- AutoCAD Map 3D

CADWorx is NOT compatible with:

- AutoCAD LT
- Autodesk Inventor
- Autodesk Revit



CADWorx is compatible with the following operating systems, based on your version of AutoCAD or the Autodesk vertical product:

AutoCAD 2018: Windows 7, Windows 10

AutoCAD 2017: Windows 7, Windows 10

AutoCAD 2016: Windows 7, Windows 8

AutoCAD 2015: Windows 7, Windows 8

For the most up-to-date AutoCAD system requirements, check the Autodesk website.

**Important:** Beginning with Windows 10 and Oracle 12.1.0.2, Microsoft and Oracle will enforce the Internet Host Table Specification RFC 952 which mandates that component hostname labels can contain only alphanumeric characters. Hostnames using underscores ('\_') are not allowed. Refer to Oracle Support Articles 1603775.1 and 1957895.1 and Microsoft KB 101785.

## BricsCAD

CADWorx is compatible with the following BricsCAD versions:

BricsCAD 17.2

The operating system compatibility is based on BricsCAD used:

BricsCAD 17.2: Windows 7, Windows 10

## Version Compatibility

For up-to-date information on the software compatibility of this product in a standalone or integrated environment, please refer to the Compatibility Matrix on the Intergraph PPM Support Web site at <https://smartsupport.intergraph.com/>.

Log on and perform the following steps:

1. Click the **View Downloads** tab.
2. Click the **Product Compatibility** link under **Useful Links** on the right side.
3. On the **PPM Compatibility Matrix - Product Report** page, from the Select Product list, select CADWorx.
4. From the **Version** list, select the version of CADWorx.

## Documentation

### General

Use the Help menu to access the Help files and Printable Guides for this product. For the latest support information for this product, use a World Wide Web browser to connect to <http://support.intergraph.com>. Also, you can submit any documentation comments or suggestions you might have on the Intergraph support site.

Printed documentation is not available for separate purchase.

### PDF Files

The documentation is provided as .pdf files. You can use any PDF viewer to view the files.



## Training

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## CADWorx New Features

### New Features in CADWorx Plant 2018

This version of CADWorx Plant features the following new enhancements:

- Removed **CADWorx Steel** tab and steel references from the user's guide.
- Added a vertical option to pipe supports. Now, when you place a pipe support on a sloped pipe, you can select **Vertical** so that the support is able to vertically attach to a structure.
- Total Center of Gravity now includes Structure objects. You can bring in the model as an external reference, or you can load Structure in Plant, and then open the model.
- Enhanced **Detect Steel** when placing pipe supports. Now, when you place a pipe support above a concrete object created in CADWorx Structure, the software detects the concrete object.
- You can set the nipple length to show in the component description of the Bill of Materials using the **IsogenAppendNippleLength** variable.
- Added the ability to adjust the placement of a half coupling when placed on a pipe. The software now contains the **stubIn**, **stubOn**, and **Manual** placement options when you place a half coupling with any insertion option.
- Enhanced the elbow type option in the router. You can select **Show Option** to insert all available elbow types.
- Enhanced the slope and skew routing. **Skew** is now a toggle option, which allows you to easily skew while routing sloped pipe. You also have additional options in slope for vertical piping, and for auto connection.
- Added information about using the Get External Data function delivered with the software.
- Added support for defining **Project Defaults** in I-Configure. You use **Project Defaults** in combination with the **ISOGENPROJECTDATASETUP** to manage project-wide attributes. Attributes also defined in the **ISOGENPROJECTDATASETUP** section override any defaults assigned to the project.
- You can replace components within the model using the **REPLACECOMPS** command. Alternatively, you can select a component, and then click the replace grip point  to choose a replacement from a list of components.



- You can click a valve in the model space, and then click the topworks replace grip point  to delete, change the type, or the orientation of the topworks.
- Enhanced the **Variable Component Length Assignment** rule. When you set this rule to **Use Catalog Length**, the software only uses the data in the catalog for the length. To enter a length for the variable length component, you must set **Show Options** for this rule.
- Added support for CAESAR II 2018.
- Enhanced the logic of **Show optional components** in the **Settings** tab of the **Spec View** palette.
- You can turn updates on or off for **Pipe Support Geometry** in the **Apply Change Data Rule**. When you turn this option on, variable length pipe supports do not update to the catalog lengths, but remain the length defined in the 3D model.
- Added a **Default** option to **Generic Attach**. The **Default** option automatically places the center of gravity and tag annotation at the centroid of the selected non-CADWorx object. You can also select a point as needed to define the center of gravity and tag annotation.
- CADWorx Plant now uses a local acad.pgp file in the **Support** folder for the command acronyms instead of the system wide acad.pgp used previously.
- Supports AutoCAD 2018.



## New Features in CADWorx P&ID 2018

This version of CADWorx P&ID features the following new enhancements:


- Added the **PIDUPDATEDWGFROMDB** command, which allows you to update the drawing from the database.
- Enhanced the insertion of reducers. When you insert a reducer, the software provides you with an option to change the size of the line on the opposite side of the reducer.
- When you insert a reducer on a line size different from the size settings in the **CADWorx P&ID Setup**, the software places the reducer based on the size of the line.
- Enhanced the process lines when you move a corner grip. The process line moves all attaching components, the tag, and breaks the lines it crosses. The corner grip does not allow moving the line beyond an inline component.
- CADWorx P&ID now uses a local acad.pgp file in the **Support** folder for the command acronyms instead of the system wide acad.pgp used previously.

## New Features in CADWorx Design Review 2018

This version of CADWorx Design Review features the following new enhancements:

- Updated the quick access toolbar to include **Undo**  and **Redo** .
- Moved the **Annotations** panel to the **Home** tab for quicker access, and removed the **Edit** tab.
- Added an option to change the CADWorx Design Review theme to **Light** or **Dark** in the **Settings** tab.
- Added **Missing File** to the **Settings** tab to search the master file and all subfolders for any missing files when you open a drawing with external model references.
- Added a refresh button to the **Home** tab to reload all model content.



- You can add a description and user information for annotations in the **Note Text** section of the **Saved Views and Animations** tab.
- Added **Refresh Type** to the **Settings** tab. **Refresh Type** defines what action the software takes when you click **Refresh** on the **Home** tab. This option enables you to set the software to update the graphics and tool tips, or update all model data.
- Added an option to define the component representation type when you export to IFC.
- Moved the .ifc, .avi, and .jpg save options to **Export**.
- You can export your model to an .html file, and then view it in mobile device web browsers or in **Web Viewer Desktop**.
- You can export AutoCAD solid objects in IFC format.
- The **View Cube** replaces the **Standard Views** panel.
- Enhanced the measurement tool. You can click a point, and then click a second point to define your measurement instead of dragging the mouse. To adjust the measurement box you can click it, and then move as required. The software provides dimension lines to the selected points in the model.
- You can save a view of your placed measurement. Place a measurement, and then click Save Camera Position . The model saves your measurement in the view to the *Saved Views tab*.
- Combined the Plan and Elevation Views windows into one Additional View window where you can orbit, pan, zoom to selection, zoom extends, and view plan and elevation views.
- Use cutting planes in x, y, and z to view cut sections of your model.
- Create clippings of your model using **Volume Clipping**. The software provides you with a 3D box that allows you to view specific sections in the confines of that 3D box.
- The **Settings** tab replaces the **Properties** tab. The **Model Data** tab replaces the **CADWorx Properties** tab.

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Intergraph Corporation  
305 Intergraph Way  
Madison, AL 35758



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