

Autodesk® Factory Design Suite

The flexibility to innovate
and accelerate new business.

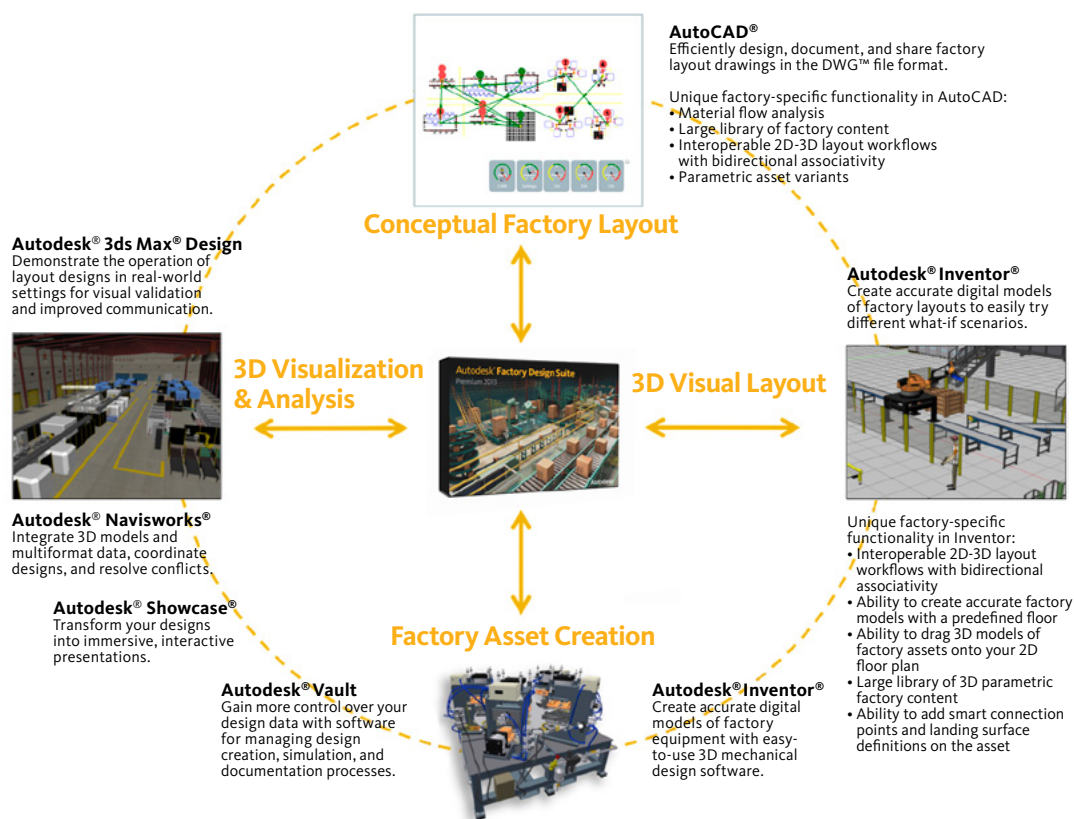


Rendering of Packaging Automation layout. Autodesk® Inventor®, AutoCAD®, and Autodesk® 3ds Max® Design software products, included in Autodesk® Factory Design Suite, were used in the design process. Packaging Automation layout provided by Barry-Wehmler Design Group, Inc.

Autodesk®

Extend the Benefits of Digital Prototyping to the Factory Floor

Autodesk® Factory Design Suite enhances the power of AutoCAD® software with the benefits of Digital Prototyping—so you spend less time drafting and more time optimizing and visually communicating factory layouts.



Autodesk® Factory Design Suite is an interoperable 2D and 3D factory layout and optimization solution built specifically to help you design and communicate the most efficient layout by creating a digital model of your factory. It enhances AutoCAD® and Autodesk® Inventor® software with exclusive access to interoperable layout workflows and factory-specific content to help improve your design efficiency, accuracy, and communication.

Win More Business

Factory Design Suite helps you quickly evaluate multiple what-if layout scenarios to determine the best solution before any equipment is installed. It provides factory-specific visualization tools to help impress potential clients with immersive layout proposals in 3D instead of multilayered 2D drawings that can be difficult to interpret.

Meet Compressed Project Schedules

Complete layout projects on time and within budget with automated workflows and a factory-centric work environment in AutoCAD and Inventor. Move from 2D conceptual layout to manipulating a 3D factory model with a library of parametric factory content instead of sketching it all by hand. It supports the DWG™ file format, so you can build on top of existing data to boost your efficiency.

Optimize Your Factory Layout Process

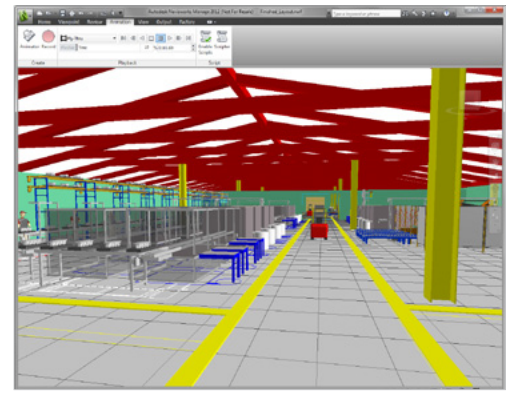
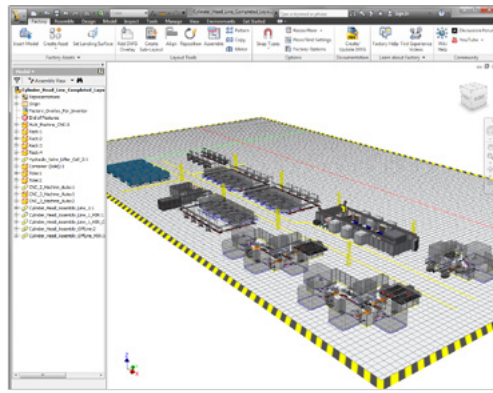
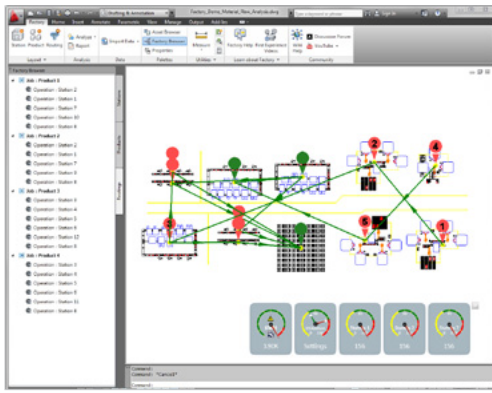
This factory-focused solution can help you create layout designs much faster than traditional layout workflows. Analyze existing 2D layouts for more efficient material flow, and transform layout liabilities into profit-generating assets. Incorporate point cloud scans to capture the as-built state of your factory, drastically reducing time spent on manual measurement.

Collaborate More Effectively with Suppliers and Partners

Bring the factory to life and improve communication using immersive, high-quality 3D renderings and visualizations. Include models from suppliers in your layout regardless of CAD format, shrink-wrapping and stripping them of unwanted details. Reduce installation risks by analyzing the digital factory model for clashes and space constraints, before they become problems on-site.

Take Advantage of Cloud-based 3D Asset Publishing, Sharing, and Storage

With Autodesk® 360, Factory Design Suite users can manage their assets, collaborate, and share layout designs with various stakeholders online via the DWF™ file format. Both public and private sharing capabilities make it easy to collaborate internally or share with external stakeholders.



Autodesk Factory Design Suite offers:

- **2D and 3D visual layout environment**
Easily try what-if scenarios by dragging models of machine and facilities content on top of your 2D floor plan. With bidirectional associativity, 2D drawings and the 3D factory layout model automatically update whenever the layout design changes.
- **Large library of factory assets**
Access out-of-the-box 2D and 3D parametric factory content such as conveyors, material handling equipment, and facility equipment that can be resized and reused.
- **Factory asset builder**
Use Autodesk Inventor software to create 3D models of factory equipment, or easily import factory assets from suppliers to include in your layout.
- **Factory cloud-based services**
Publish, share, and manage assets with both public and private sharing capabilities that make it easy to collaborate internally or share with external stakeholders. Collaborate and share layout designs with various stakeholders in the DWF file format on mobile devices or online.
- **Factory design efficiency**
Improve your digital factory design efficiency by automating repetitive manual tasks such as creation of plan views and section views of the layout, and save time on tape measurements by using laser scanning in your layout workflows.
- **3D factory visualization and analysis**
Collaborate better with immersive, high-quality renderings and visualizations, and reduce installation risks by exploring digital factory models with interactive 3D virtual walk-throughs and fly-throughs.

Learn how Autodesk Factory Design Suite can accelerate your factory layout process at www.autodesk.com/factorydesignsuite.

Build Your Digital Factory

Only Autodesk Factory Design Suite adds factory-specific functionality to AutoCAD, Autodesk Inventor, and Autodesk® Navisworks® software and combines them with powerful visualization tools such as Autodesk® 3ds Max® Design and Autodesk® Showcase® software to help manufacturers improve innovation, collaboration, and flexibility when responding to changing business requirements.

Autodesk Factory Design Suite adds the following factory-specific functionality in AutoCAD:

- Material flow analysis
- Large library of factory content
- Interoperable 2D-3D layout workflows with bidirectional associativity
- Parametric asset variants

Autodesk Factory Design Suite adds the following factory-specific functionality in Inventor:

- Interoperable 2D-3D layout workflows with bidirectional associativity
- Ability to create accurate factory models with a predefined floor
- Ability to drag 3D models of factory assets onto your 2D floor plan
- Large library of 3D parametric factory content
- Ability to add smart connection points and landing surface definitions on the asset
- Automatic conversion of 2D drawings into 3D layouts

Autodesk Factory Design Suite adds the following factory-specific functionality in Navisworks:

- Floor plane for layout workflows
- Repositioning commands specifically built for quickly laying out machines and other equipment
- Switchback with Inventor

AutoCAD Architecture

AutoCAD® Architecture is AutoCAD software for architects, combining architectural drafting tools with a familiar AutoCAD software-based working environment to increase design productivity and improve collaboration.

Autodesk Inventor

Create accurate digital models of factory layouts and equipment with a factory-specific parametric work environment that helps you to make better layout decisions before any equipment is installed.

Autodesk Inventor Professional

Design, visualize, and simulate factory equipment under real-world conditions with advanced 3D mechanical design, product simulation, routed systems design, and tooling creation software.

AutoCAD Mechanical

Create and revise mechanical drawings quickly using all the functionality of world-class AutoCAD software, plus a complete set of features designed to boost mechanical design productivity.

Autodesk 3ds Max Design

Create photorealistic renderings and cinema-quality 3D animations with award-winning software. Demonstrate the operation of layout designs in real-world settings to improve communication and accelerate your path to new business.

Autodesk Showcase

Transform CAD data into compelling imagery, movies, and interactive presentations to improve the design review process, secure internal buy-in, and win competitive bids. Realistic environments, lighting, and materials let stakeholders and prospects experience your designs before any equipment is installed.

Autodesk Navisworks

With Autodesk® Navisworks® software you can integrate 3D models and multifformat data, reduce construction risks, and validate design accuracy by detecting space constraints and equipment collisions early in the design process with project review software.

Autodesk Vault

Gain more control over your design data with software for managing the factory layout design creation, optimization, and documentation processes.

Autodesk Factory Design Suite Standard

- AutoCAD®
- AutoCAD® Architecture
- AutoCAD® Mechanical
- Autodesk® Vault
- Autodesk® Showcase®
- Autodesk® Factory Design Suite Utilities

Autodesk Factory Design Suite Premium

- AutoCAD®
- Autodesk® 3ds Max® Design
- Autodesk® Inventor®
- Autodesk® Navisworks® Simulate
- AutoCAD® Architecture
- AutoCAD® Mechanical
- Autodesk® Vault
- Autodesk® Showcase®
- Autodesk® Factory Design Suite Utilities

Autodesk Factory Design Suite Ultimate

- AutoCAD®
- Autodesk® 3ds Max® Design
- Autodesk® Inventor® Professional
- Autodesk® Navisworks® Manage
- AutoCAD® Architecture
- AutoCAD® Mechanical
- Autodesk® Vault
- Autodesk® Showcase®
- Autodesk® Factory Design Suite Utilities

Digital Prototyping for the Manufacturing Market

Autodesk is a leading supplier of engineering software, providing companies with tools to design, visualize, and simulate their ideas. By putting powerful Digital Prototyping technology within the reach of mainstream manufacturers, Autodesk is changing the way manufacturers think about their design processes and is helping them create more productive workflows. The Autodesk approach to Digital Prototyping is unique in that it is scalable, attainable, and cost-effective, which allows a broader group of manufacturers to realize the benefits with minimal disruption to existing workflows, and provides the most straightforward path to creating and maintaining a single digital model in a multidisciplinary engineering environment.

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