AUTODESK®


**Autodesk® Inventor® mechanical design software takes you beyond 3D to Digital Prototyping, enabling you to design, visualize, simulate and make great products.**

- Digital Prototyping
- Easy-to-use 3D mechanical design
- Large assembly design
- Free-form modeling
- Sheet metal design
- Direct editing
- Rules-based design/automation
- Catalog/purchased/standard part library
- Frame and weldment design
- Plastic parts design
- Electrical systems design/tube and pipe runs
- Mold, and tool and die
- Electrical engineering
- Integrated electrical and mechanical design
- Explore design concepts in AutoCAD
- Sketch designs, produce stunning artwork
- Create 3D digital artwork
- Real-time design visualization
- Photorealistic rendering and presentations
- Cinematic-quality rendering and 3D animation
- Point cloud tools
- Select material by environmental/cost impact
- Assembly collision and interference detection
- Check for manufacturability
- Draft analysis
- Validate performance with simulation and FEA
- Simulate installation or demolition sequences
- Review/mark up DWG™, DWF, and PDF files
- Mobile and online sharing of 3D designs
- BIM interoperability
- Native translators
- Large-scale design review and collaboration
- Design fly-throughs and walk-throughs
- Professional drafting and documentation tools
- TrustedDWG™ technology
- Automatic drawing view creation
- BOM generation
- International standards support
- In-product data management
- Configurable data security
- Multiple user/concurrent design
- Easy administration
- Automated design organization

Autodesk® Inventor® software, part of the Autodesk solution for Digital Prototyping, takes manufacturers beyond 3D to Digital Prototyping by giving engineers a comprehensive and flexible set of tools for 3D mechanical design, simulation, tooling, visualization, and documentation. With Inventor software, you can integrate 2D Autodesk® AutoCAD® drawings and 3D data into a single digital model, creating a virtual representation of the final product, enabling you to validate the form, fit, and function of the product before it is ever built. Digital Prototyping with Inventor software enables you to design, visualize, and simulate products digitally, helping you to reduce development costs, get to market faster and make great products.

Design the way you want with freeform, direct, and parametric modeling tools in Inventor® and Inventor® Professional 3D CAD software. Build large assemblies. Create engineering drawings. Model complex plastic and sheet metal parts. Work with non-native data from any CAD application. Collaborate with suppliers and vendors, and share designs with customers who use Building Information Model (BIM) systems. Eliminate routine modeling tasks with the design automation tools in Inventor® and Inventor® Professional 3D CAD software.

**Deliver innovative products faster**

Autodesk® Inventor® products provide professional grade engineering solutions for 3D mechanical design, simulation, tooling creation, and design communication that help you take advantage of a Digital Prototyping workflow to make great products, cost-effectively, in less time.

Autodesk Inventor software is the foundation of the Autodesk® solution for Digital Prototyping. The Inventor model is an accurate 3D digital prototype that enables you to validate the form, fit, and function of a design as you work, minimizing the need to test the design with physical prototypes. By enabling you to design, visualize, and simulate your products digitally, Inventor software helps you connect more effectively, reduce errors, and deliver great product designs faster.

**Design and validate products digitally**

With an intuitive design environment for developing initial concept sketches and models of parts and assemblies. Inventor software provides powerful parametric modeling, robust direct editing tools and advanced surfacing modeling capabilities with T-splines. You can automate the advanced geometry creation of intelligent components, such as plastic parts, steel frames, rotating machinery, tube and pipe runs, and electrical cable and wire harnesses. Inventor software also helps reduce the geometry burden so you can rapidly build and refine digital prototypes that validate design functions and help minimize manufacturing costs.

Traditionally, validating the operating characteristics of a design before it was built meant hiring expensive specialists. But with Inventor, you don’t need to be a simulation expert to effectively simulate and optimize designs digitally. Inventor products include easy-to-use and tightly integrated part and assembly-level motion simulation and stress analysis functionality. By simulating stress, deflection, and motion, you can optimize and validate your design under real-world conditions, before the product or part is ever built.

**Streamline mold design**

Autodesk Inventor products include automated mold design tools that work directly from Inventor 3D models of plastic parts. Powered by Autodesk® Moldflow® plastic flow analysis tools, Inventor can help to optimize your design for moldability and minimize the number of mold iterations.