



Questions and Answers

1. General

1.1 What is Autodesk Inventor 7?

Autodesk Inventor[®] 7 software is a high-performance 3D mechanical design system built for mechanical designers and engineers who need to reduce design time, get better products to market faster, and retain their competitive advantage. It is the most advanced mechanical CAD software in the midprice range, offering a painless transition from 2D to 3D design. Autodesk provides a total manufacturing solution consisting of AutoCAD[®] 2004, AutoCAD[®] Mechanical 2004, Autodesk Inventor[®] Series 7 software—which includes Autodesk Inventor 7 and Autodesk[®] Mechanical Desktop[®] 2004—the Autodesk Inventor Certified Application Program, the Autodesk Streamline[®] online project collaboration service, and Autodesk Professional Services.

Autodesk Inventor offers unique functionality that

- Speeds and simplifies the design process
- Makes the design process easier to manage
- Enhances performance (particularly with respect to large-assembly design)
- Integrates all these capabilities into one package that's easy to learn and use

Autodesk Inventor software is the industry's easiest system to learn and use. It offers a simple user interface, an advanced help and support system, and specific built-in migration assistance for the AutoCAD user. The software successfully combines 2D capabilities with the power of 3D and provides industry-leading DWG compatibility.

1.2 What are the key new improvements to Autodesk Inventor 7?

Autodesk Inventor 7 provides major improvements in three key areas:

- **New DWG Support for AutoCAD 2004.** The Autodesk Inventor Series 7, which includes Autodesk Inventor 7 and Autodesk Mechanical Desktop 2004, continues to offer industry-leading DWG compatibility by supporting data exchange with AutoCAD 2004 files. Its improved workflow functionality groups frequently used commands to reduce the number of steps required for common design tasks. Users benefit from a quicker workflow wizard that offers better translation results.
- **Autodesk[®] Express Viewer Compatibility.** Autodesk Inventor 7 now supports publishing DWF[™] (Design Web Format[™]) files for use with Autodesk[®] Express Viewer. New capabilities for DWF files include multiple 2D sheets, print-ready format, and a single publishing format for all Autodesk[®] design tools.
- **Large-Assembly Design Performance.** Autodesk Inventor 7 includes two enhancements for large-assembly performance. You can now make visible only those components needed for a given design task, limiting the number of parts displayed and the amount of memory needed. Taking advantage of new capabilities in Microsoft[®] Windows[®] XP Professional, Autodesk Inventor 7 software can now get the full benefit

from workstations with 3 GB of system memory. This is 30 percent more memory than previously possible, so you can create larger designs even faster.

1.3 What is the Autodesk manufacturing solution?

The combination of Autodesk Inventor software, the Autodesk Inventor Certified Application Program, the Autodesk Streamline online project collaboration service, and Autodesk Professional Services provides a solution that helps you complete your manufacturing processes.

The Autodesk Inventor Certified Application Program helps you extend the value of Autodesk Inventor 7 software with third-party applications available across multiple manufacturing disciplines. With a powerful and easy-to-use API (application programming interface), third-party developers can create Autodesk Inventor-compatible applications that provide the look and feel and ease of use you get with Autodesk Inventor software. Certified applications have met standards set by Autodesk to ensure robustness, quality, and the highest level of interoperability with Autodesk Inventor software. This program gives you the choice of numerous applications that work smoothly with Autodesk Inventor software and help you complete your design-through-manufacturing process.

In addition to the Autodesk Inventor Certified Application Program, Autodesk Inventor software and the Autodesk Streamline service combine to enable you to look beyond solid modeling and gain efficiencies using technologies that expand the value of digital design data beyond your design department.

The Autodesk Streamline service gives you the ability to share design data with your extended manufacturing team. Through connecting this team—which may consist of representatives from sales, marketing, purchasing, documentation, and the shop floor, as well as suppliers, engineers, machinists, and others—and personalizing data pertinent to the consumer, your product development processes become more efficient, saving time and money and helping you stay competitive.

Autodesk Professional Services provides integrated consulting, training, and support to help you maximize the value of your investment in Autodesk technology. Autodesk consulting professionals have advanced product knowledge and industry experience to guide you through projects of any size or complexity. Autodesk training professionals offer the right blend of classes and online learning to ensure that you use the software to its full potential. Autodesk support professionals can help when problems arise, providing answers that minimize downtime and boost productivity. Whatever your requirements, Autodesk Professional Services helps you achieve the highest possible return on your technology investment.

1.4 How well has Autodesk Inventor software done since its introduction?

Autodesk Inventor software is doing extremely well in the marketplace. There were more than 40,000 commercial new Autodesk Inventor Series licenses sold in FY03. Additionally, since its introduction, Autodesk Inventor has been recognized as leading midpriced design software with many industry awards, including *CADENCE* Magazine's Show Stopper and Editor's Choice Awards and *CADALYST* Magazine's All-Star Award.

2. Moving from 2D to 3D Design

2.1 What are some of the core benefits of moving to 3D design with Autodesk Inventor software?

Autodesk Inventor software is the easiest 3D mechanical design system to learn and use because it offers a simplified user interface, an advanced help and support system, and specific built-in migration assistance for the AutoCAD user. The software successfully combines 2D capabilities with the power of 3D and provides industry-leading DWG compatibility.

2.2 Is it easy to maintain and reuse AutoCAD and AutoCAD Mechanical data in the Autodesk Inventor application?

Yes. Autodesk Inventor gives you the ability to maintain and reuse AutoCAD data intelligently and also provides the best migration tools and DWG compatibility in the industry.

The AutoCAD import features of Autodesk Inventor software reproduce an AutoCAD drawing as accurately as possible while maintaining the intelligence of the design data. Wizard-based workflows help you open existing AutoCAD and Autodesk Mechanical Desktop data in the Autodesk Inventor application. The software provides an interactive preview of the drawing file selected for translation, allows custom import and export of AutoCAD layers, and furnishes special tools to help convert this data to title blocks, borders, symbols, or new 3D designs. You can also add intelligence such as 2D parametrics to DWG data, use existing 2D data in the context of a 3D assembly for conceptual design (adaptive layout), and use 2D data to create new 3D models.

In addition, the Autodesk Inventor integrated Design Support System has numerous built-in features developed to help users of Autodesk mechanical products become immediately productive. Some of the user-friendly tools in the Design Support System include animations that demonstrate how to use Autodesk Inventor, help topics that explain how to import and export files easily, a list of frequently asked questions to provide information on the differences between the AutoCAD and Autodesk Inventor programs, and a command map that compares AutoCAD commands to the corresponding Autodesk Inventor tools.

2.3 Is it easy to reuse data from Autodesk Mechanical Desktop in Autodesk Inventor software?

Yes, Autodesk Mechanical Desktop users benefit from all the same advantages as AutoCAD users. Autodesk Inventor software offers the best migration tools and DWG compatibility in the industry. In addition, you can migrate 3D feature-based designs into Autodesk Inventor software and keep your 2D drawings, as well as retain the intelligent assembly association inside Autodesk Inventor, a capability unique to the Autodesk Inventor program.

With more than 300,000 Autodesk Mechanical Desktop licenses sold worldwide, there are many users who are interested in moving to Autodesk Inventor who need a safe, simple, and reliable migration path. Autodesk offers industry-leading DWG compatibility, providing the easiest migration path. In addition, the Autodesk Inventor Series offers the easiest transition from 2D to 3D design in one package.

2.4 Is it possible to create AutoCAD drawings in Autodesk Inventor?

Yes. DWG files created in Autodesk Inventor are visually complete and organized in a manner consistent with AutoCAD conventions. This means that you can go from 2D to 3D or vice versa—giving you the ability to move design data back and forth.

2.5 What support is offered in Autodesk Inventor to help me get started?

Autodesk Inventor technology offers the easiest to use and most intuitive user interface for production-level 3D design. Autodesk Inventor software offers ease-of-use with optimized workflow, leading-edge graphics, built-in migration for AutoCAD users, and an expanded Design Support System with context-sensitive tutorials.

The application's gesture-based user interface, easy-to-use sketcher, deeply embedded help system, and Design Support System all contribute to enhancing productivity. With these tools, you can become productive in the first Autodesk Inventor session. In addition, the Design Doctor™ tool provides detailed information to help modify or repair models that fail to regenerate.

2.6 How does Autodesk Inventor simplify the transition from 2D to 3D?

Users interested in making the transition from 2D to 3D will find that Autodesk Inventor technology with AutoCAD 2004 support offers industry-leading DWG compatibility. The Autodesk Inventor AutoCAD import features are focused on reproducing AutoCAD (or other DWG file) drawings accurately, while maintaining the intelligence of the data. You can also take advantage of an integrated innovative support and help system known as the Design Support System, which is instrumental in helping you move from 2D to 3D. This Design Support System is unique in the industry and will help you significantly reduce the time and cost of learning or relearning the software. It also increases power-user productivity through the use of visual design aids and in-context help options.

In addition, Autodesk Inventor software supports the easiest to use and most intuitive user interface for production-level 3D design, providing tools that take advantage of the Microsoft® Windows® environment such as standard toolbars, menus, component technology, Microsoft Visual Basic®, and drag-and-drop capabilities.

2.7 Does Autodesk Inventor support industry-standard file exchange formats?

Yes. Autodesk Inventor software can import and export DWG, DXF™, SAT, STEP (*.stp, *.ste, *.step) and IGES (*.igs, *.ige, *.iges) file formats as core functionality. It also supports BMP, STL (stereolithography), XGL, ZGL, Autodesk Streamline (*.amp, *.ptp, *.pnp, *.dwp), DWF and Autodesk® VIZ, 3ds max™ (with free plug-in) for output only. In addition, Autodesk Inventor can import Pro/ENGINEER® (*.prt, *.asm) up to version 20.

3. Autodesk Inventor Versus the Competition

3.1 How does Autodesk Inventor software exceed the competition in ease of use?

Reflecting a user's typical workflow and workstyle, Autodesk Inventor software creates a design environment with significantly fewer and appreciably smarter commands—commands that follow the way people want to work. The integrated Design Support System dramatically surpasses anything ever attempted in this market. For example, the sketching function is gesture based, easing and speeding use of the tool and making it more efficient. Autodesk Inventor software also addresses classic areas of struggle such as a model's failing to regenerate. The Design Doctor feature provides direct feedback (for example, a fillet is too big or a shell isn't thick enough) to help diagnose design problems.

3.2 What are the advantages of Autodesk Inventor software over other 3D modeling programs?

Unlike other 3D CAD systems, Autodesk Inventor offers the power of innovative adaptive technology, as well as the flexibility of parametric modeling. Adaptive technology solves the inherent flaws of purely parametric design systems by eliminating the need to write complex equations associated with creating assembly relationships—a task that actually limits productivity rather than improving it.

Adaptive technology provides greater flexibility to capture design intent as well as manage and edit small to large assemblies. The benefit of adaptive technology is the ease with which you can create part relationships without depending solely on complex mathematics, equations, or dimensions to establish these part relationships. With Autodesk Inventor technology, you simply specify how parts fit together, and the assembly-based “fit” definition automatically determines the size and position of the parts.

In addition to Autodesk Inventor software’s superior technology, you also benefit from the total manufacturing solution offered by Autodesk and its partners. This solution provides an unparalleled depth of expertise using both Autodesk Inventor software and the Autodesk Streamline service, giving you the means to work more efficiently. Autodesk Streamline is the first hosted, web-based service that enables small and midsized manufacturers to share personalized design data across the extended manufacturing team. Combining Autodesk Inventor software with Autodesk Streamline technology not only gives you the ability to quickly connect teams to crucial design information and personalize that design information in a form useful for nondesigners, it also helps companies optimize the product development process at a comfortable pace. The Autodesk Inventor Certified Application Program helps you extend the value of your Autodesk Inventor 7 software with third-party applications available across multiple manufacturing disciplines. To complete the solution, Autodesk Professional Services provides integrated consulting, training, and support to help you realize the full benefits of your investment in Autodesk technology.

4. Availability

4.1 How do I purchase Autodesk Inventor 7?

Autodesk Inventor 7 software is offered only as part of the Autodesk Inventor Series, a unique combination of 2D and 3D technology that provides the easiest transition to Autodesk Inventor software. Autodesk Inventor Series 7 will be available worldwide in spring 2003 through authorized resellers and through the Autodesk Subscription Program in the United States and Canada. The Autodesk Subscription Program offers a convenient way to protect your software investment and to stay up-to-date on the latest Autodesk technology. For products, like Autodesk Inventor, the program provides a rapid cycle of content-rich releases as soon as they become available. The program also provides downloadable e-Learning courses and optional direct online support. For more information on the Autodesk Subscription Program, visit www.autodesk.com/subscription.

4.2 Since both Autodesk Inventor and Autodesk Mechanical Desktop programs are provided in the Autodesk Inventor Series, can I use one program while a colleague evaluates the other?

The Autodesk Inventor Series is considered one package and therefore must be installed on the same machine; both software programs (Autodesk Inventor and Autodesk Mechanical Desktop) can then be used concurrently or separately on that same machine. Network users can install both products but have a limit to the number of simultaneous users based on the number of licenses purchased. Autodesk Inventor 7 software takes advantage of powerful new functionality offered by FLEX/m[®] 8.3 so you can maximize your use of licenses through license borrowing and management.

4.3 Do Autodesk education customers in the United States or Canada receive the Autodesk Inventor Series?

Yes, Autodesk Comprehensive Education Solution (ACES) customers will receive current versions of Autodesk Inventor Series software.

4.4 How do education customers outside the United States and Canada learn about Autodesk Inventor Series availability, pricing, and additional resources?

Contact your local Autodesk Education channel partner or local Autodesk office for more information.

4.5 How can I learn more about Autodesk Inventor 7?

To learn more about Autodesk Inventor 7 available in the Autodesk Inventor Series, visit www.autodesk.com/inventor or contact your local reseller. You can find a local reseller by visiting www.autodesk.com/reseller or by calling 800-964-6432.

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