



software for the visualization, modeling, and simulation
of manufacturing, material handling, and logistics systems

flexibility to the power of 

the neXt generation in discrete-event simulation software

The future of process simulation has arrived! Flexsim is a Windows®-based, object-oriented simulation environment for modeling discrete-event flow processes like manufacturing, material handling, and office workflow—in stunning 3D virtual reality.



- ❖ Fully object-oriented with complete C++ integration
- ❖ Models created graphically, using drag and drop
- ❖ Amazing 3D virtual-reality animation
- ❖ Exceptionally intuitive, easy-to-learn interface
- ❖ Unsurpassed flexibility and power

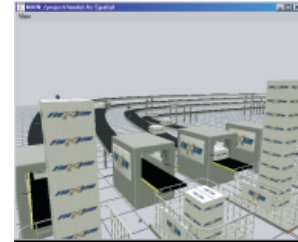


where eXperience and innovation meet

Flexsim represents the first major innovation in simulation software in the last ten years. Flexsim has been built from the ground up using today's technologies, by engineers with 20 years' experience on the cutting edge of simulation software development. Flexsim frees you from the limitations inherent in old, outdated simulation software, and gives you all the power, flexibility, and interconnectivity of today's tools. Built for the future as well as today, Flexsim pushes the concepts of openness and flexibility to the extreme, enabling things unimagined today to be modeled tomorrow!

preparing for the uneXpected

Flexsim is the perfect tool to help engineers, managers, and decision makers visualize and test proposed operations, processes, or systems in dynamic, 3D virtual reality. It is indispensable for modeling complex processes that are susceptible to breakdowns, interruptions, and bottlenecks. By modeling systems in advance, multiple "what if" scenarios can be explored without the disruption, cost, and risk involved in making real-world changes.



eXceptional applicability

Flexsim is ideal for modeling a wide range of systems and processes. Examples include:

Manufacturing

- ❖ Manufacturing of semiconductor wafer chips
- ❖ Processing of beef in a meat packing plant
- ❖ Steel manufacturing
- ❖ Filling, labeling, packaging, and palletizing of mayonnaise jars
- ❖ Electronic hardware manufacturing

Material handling

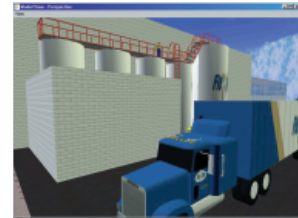
- ❖ Loading and unloading of container ships in a port
- ❖ Distribution center operations
- ❖ Order picking
- ❖ Conveyor systems and layouts
- ❖ Handling of checks at a bank processing center

Transportation

- ❖ Flow of traffic in a freeway interchange
- ❖ Movement of people and trains at a railway station
- ❖ Passage of barges going up and down a river
- ❖ Traffic congestion at an international border crossing

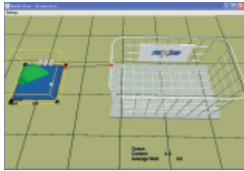
Other

- ❖ Ore mining and processing
- ❖ Cooking food and serving customers at a fast-food restaurant
- ❖ Movement of visitors through an amusement park ride
- ❖ Disassembly, refurbishment, and replacement of jet aircraft engines
- ❖ Handling of patients and food in a hospital
- ❖ Flow of data in shared-access network storage (SANS)





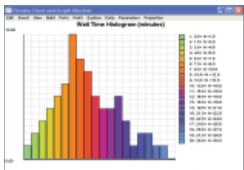
Build models in minutes with drag-and-drop simplicity!



Point and click to connect objects. Visual feedback shows links.



Choose from a wide variety of reports.



extraordinary easy to use

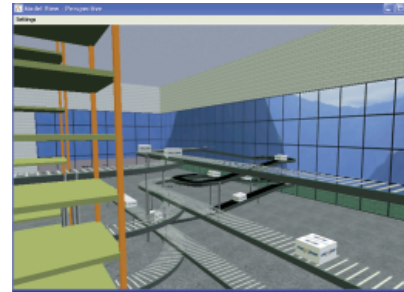
Building a Flexsim model is a snap. Just drag and drop ready-made model objects from a library onto the 3D model workspace. Set or modify the objects' characteristics, such as inputs/outputs, cycle times, speed, dimensions, appearance, routing logic, downtimes, etc., using a convenient Windows®-standard interface with handy pop-up menus, check boxes, pick lists, and the like.

Next, set up connections between the components by clicking from one component to the next. Then set up the parameters of their interaction—like cycle times, routing priority, delays, etc.—using the same type of convenient interface.

Now that the model is set up, you can run simulations, watching the process in action via Flexsim's state-of-the-art 3D animation. Changes to the system—including the addition and removal of components—can be made on the fly while the simulation is running. Flexsim is exceptional in that not only can simulations be run in standard *compressed* time (the rate of which is completely variable), but also in *real* time, making it possible for the model to monitor or even to *control* the real-world system once it has been put into operation!

Reports of performance data can be viewed and printed out during or after each simulation run, using a full array of colorful statistical tables, charts, and graphs.

Flexsim is used not only to build and run models, but also to develop custom applications that in turn can be used to build and run models for specific industries.



exhilarating graphics

Flexsim's incomparable graphical interface makes it enjoyable to use. All models are set up and run in dazzling color 3D, utilizing the same virtual-reality technologies used in today's video games. By simply clicking and dragging, the view can be effortlessly moved side to side, forward and back, zoomed in and out, and rotated with fluid ease. The model can be viewed from any angle—even from below. In the fly-through mode the user can perform virtual walk-throughs or observe the model as though flying around and through it. Multiple windows can be set up with different views in order to watch various parts of the system simultaneously while the simulation is running.



Flexsim's impressive graphics are more than mere eye candy. They help users and decision makers visualize the systems being modeled. Flexsim's animations and reports make for compelling presentations that help persuade decision makers to accept your recommendations. After all, seeing is believing. And Flexsim's graphics have to be seen to be believed!

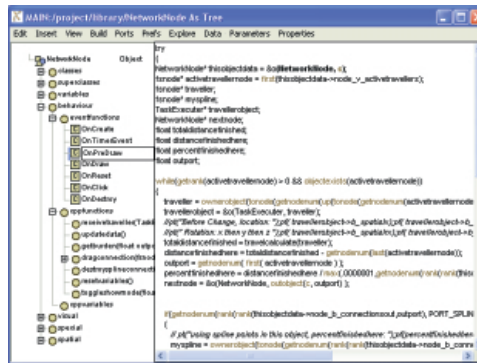
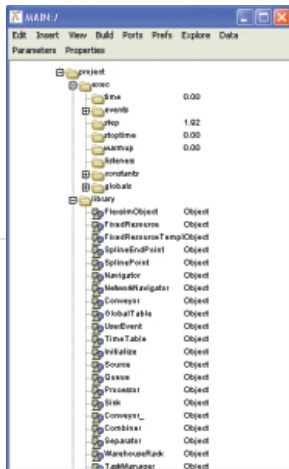


eXclusively object-oriented

Flexsim uses a library of robust “objects” to model real-world objects, processes, and systems. The software is written in C++, today’s most commonly used object-oriented language. All model-building resources in Flexsim are objects, whether they are products, models, tables, records, libraries, the graphical user interface (GUI), or even the application itself. Objects can inherit attributes and behavior from other objects, contain other objects, create and destroy objects, move objects into and out of each other, and even self-destruct.

Flexsim’s pervasive object orientation greatly streamlines the modeling process. Objects developed for one model can readily be stored in libraries for use in other models, reducing time-consuming duplication of effort. Flexsim comes with an extensive library of robust, ready-to-use objects. Users can readily modify these using the built-in object editor, or can create their own from scratch using either C++ or the powerful Flexscript™, a pre-compiled library of C++ code that can control virtually every aspect of the program.

The handy tree view of objects can be used to inspect and modify attributes in a flash.



Use the power of full C++ integration to extend Flexsim’s capabilities even further.

eXtremely gregarious software

Openness and interconnectivity are hallmarks of Flexsim’s architecture. Flexsim is fully integrated with C++, so users can readily modify Flexsim to meet their specific needs without having to learn proprietary code. All animation is OpenGL and all graphics are industry-standard 3DS, DXF, WRL, or STL objects. Results can be exported via DDE, ODBC, and Windows Sockets. Third-party applications like Expert Fit™, OptQuest™, and VISIO™ are also compiled into the application to add flexibility and ease of use. Flexsim will link to any ODBC database (like Oracle™ or Access™), common data structures (like text, Excel™, or Word™ files), and virtually any hardware device that can be connected to a PC.

going the eXtra mile

In keeping with our commitment to our clients’ success using Flexsim products, we offer a wide variety of services. Support is available from our help desk. We also hold training courses on a regular basis. (For an up-to-date schedule, visit our web site at www.flexsim.com.) We also offer live, remote, on-line help that enables users to watch the model on their own monitor in real time as we discuss it and make modifications. We maintain a special user-community web page that allows users to communicate with each other and share ideas, and we organize annual Flexsim user conferences. We take no shortcuts in supporting our users.

Sometimes it is more cost-effective to have experienced consultants finish a project in an expedited manner than to try to do it all in-house. Our consulting division can complete serious simulation projects for you or custom-build Flexsim objects for your use in a timely fashion, thus saving you both time and money. Our consulting services range from modeling support, to troubleshooting, to building objects to specification, to doing complete simulation studies from start to finish. Call for a free quote.

We also offer our skills to customers who want to create a commercial product, based on Flexsim technology, targeted to specific market niches.

In addition, Flexsim has a growing network of partners with a thorough knowledge of our software and experience in specific applications. We will be glad to put you in touch with them. Simply contact us with your needs.

the neXt move is yours

Flexsim is the most powerful, flexible, easy-to-use, and graphically compelling Windows-based simulation environment in the market today. Quite possibly it is the exact product your enterprise needs to boost productivity, eliminate bottlenecks, and enhance profits. Put Flexsim to work for you. Contact us today and we'll fill you in on all the details.

The growing family of Flexsim products:

- ✦ Flexsim GP
- ✦ Flexsim Fabmodeler
- ✦ Flexsim Port
- ✦ Flexsim SANS

our eXpanding clientele

A sampling of the companies that rely on Flexsim for their modeling includes:

Alcan
APM Terminals
Axcelis
Baker Oil
Bechtel
Bose
Caterpillar
Discover Financial Services
Dofasco
General Mills
Goodyear
INA-USA
International Game Technology
International Paper
International Sematech
Lockheed Martin
Los Alamos National Laboratory
Maersk Sealand
Michelin
Micron
Pratt & Whitney
Schreiber Foods
Seagate
Sikorsky Aircraft
Storage Tek
United Technologies
W. L. Gore & Associates
W. W. Grainger



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