Organizations planning on building or expanding operations need to better understand how to get the most out of their equipment, personnel and resources to be able to reduce capital costs and operating expenses while increasing profits and facility utilization. The Applied AutoMod simulation software models the design of the facility and allows you to simulate the material handling, logistics or distribution systems.

3-D SIMULATION SOFTWARE
Applied AutoMod™ simulation software meets the needs of both the casual, first-time user and the full-time simulation model builder. You can easily and accurately simulate systems of any size or level of detail, from manual operations to fully automated facilities. Your success and productivity are enhanced when you use the unique capabilities of Applied AutoMod, such as:

- 3-D virtual reality animation graphics
- Interactive modeling
- Material handling templates
- English-like language

COMMUNICATE WITH 3-D GRAPHICS
Applied AutoMod provides true to scale 3-D virtual reality animation, making simulation models easy to understand and invaluable for communicating new ideas or alternatives. When all aspects of an operation are viewed in a 3-D animated model, communication between management, production and engineering is dramatically improved. Project teams can examine the model from any angle and at any scale while the model is running. Applied AutoMod contains CAD-like features to define the physical layout of manufacturing, material handling and distribution systems. Applied AutoMod has a powerful graphical interface, which accurately captures the physical constraints of distance, size and space in 3-D.

TRUST ACCURATE STATISTICS
Applied AutoMod automatically generates statistical output reports and graphs. This output provides information on all aspects of your system, such as equipment utilization, inventory levels and the total time parts are in a facility. Statistical reports can be viewed in tables or with built-in business graphics. Charts and graphs enhance the understanding of your system and convey results to others.

WHEN SHOULD YOU SIMULATE?
Simulate when you’re designing a new facility or system. Simulate when you’re adding new equipment or retrofitting an existing facility. Simulate throughout the life of a facility for continuous operational improvement. Simulate to support intuition and experience in decision-making.

MATERIAL HANDLING
Many manufacturing systems include a substantial amount of material handling. Applied AutoMod can be used to simulate both manual, continuous flow and automated material handling systems with an unsurpassed level of accuracy. In fact, many of the world’s material handling equipment suppliers use AutoMod to prove their material handling systems will work as designed.
Applied AutoMod provides the user with expert-based material handling templates that have been developed through real-world experience in industrial automation. A substantial portion of the underlying model logic is automatically generated for the model builder. Applied AutoMod material handling modules include: Conveyors, Path-Based Vehicle Movement, Power & Free, AS/RS, Bridge Crane, Tanks & Pipes.

Applied AutoMod also does automatic connection of sections and routing of loads through conveyor and path mover systems, eliminating a substantial amount of work from the model building process. Applied AutoMod takes care of many of the material handling system details for the model builder, saving time, increasing accuracy, and helping create more accurate models.

Applied AutoMod 3-D animations enhance the understanding of complex systems.

INDUSTRIES USING APPLIED AUTOMOD
- Aerospace
- Airports/baggage handling
- Automotive
- Logistics
- Manufacturing
- Parcel and letter handling
- Semiconductor
- Steel and aluminum
- Transportation
- Warehousing and distribution

OPTIONAL FACTORYWORKS MODULES
Applied AutoMod’s material handling modules combine the power of a CAD system with an easy-to-use graphical user interface (GUI). As the user draws conveyor sections to scale in Applied AutoMod’s CAD environment, conveyor section performance parameters can be input, including: speed, acceleration, deceleration, accumulation type, and load spacing.

Applied AutoMod provides flexibility that is easily applied to simulating an infinite variety of applications, from manual operations, work cells and fork trucks in manufacturing to airline ticket counters, rental car service operations, fast-food drive-up, layout and logistics systems.

INFINITE FLEXIBILITY

EXTEND THE POWER OF APPLIED AUTOMOD
A variety of extensions to Applied AutoMod are available for animations, Presentations, analysis and communications.

Kinematics
Animate robots and equipment The Kinematics module allows you to simulate robots and other equipment containing moving parts and to integrate them into an Applied AutoMod model.
Kinematics allows model builders to simulate robots and other moving devices that have rotational and translational movement axes. The motion and time are accurate. With the Kinematics extension users can model vertical and scissor lifts, specialized robots, carousel inserter/extractors, or any other device.

AutoView
Present graphics and animated movies
AutoView creates fast, smooth and professional looking animations of Applied AutoMod models. Using AutoView is like directing a film. The user creates a script using the animation generated by Applied AutoMod. AutoView’s camera gives the user the ability to zoom in and “walk through” the model, pan from one view to the next, and move back and forth in time and space. The camera can also be mounted to a moving object in the model, like a forklift truck or a pallet. AVI standard movie format is produced using single frame capture. This allows even the largest models to animate smoothly with easy distribution to simulation stakeholders for validation.

AutoStat
Perform analysis and optimization
The AutoStat™ module provides enhanced statistical analysis during the experimentation phase of simulation projects. Through a point-and-click Windows interface, AutoStat makes it easy to define desired experiments and make all the necessary runs. AutoStat consolidates all of the model results, providing tables that are easily reviewed or imported into spreadsheets, as well as providing descriptive statistics, such as the sample mean (over multiple replications). AutoStat provides warm-up determination, single and comparison confidence intervals, factor/response analysis, and design of experiments. AutoStat’s Evolution Strategies-based optimization will help you find the best solution from a multitude of possible combinations of input factors.
**Model Communications Module**

**Exchange Data**

The Model Communications Module™ allows information to be transferred between models and control systems, multiple models, and models to other applications. Communication between simulation models and material delivery control systems allows users to test control system design prior to implementation. Using simulation scenarios is faster and more cost effective than testing a system during on-site commissioning. The Model Communications Module also enables users to independently build two or more models and easily send and receive data between the models during simulation. Multiple models can be run separately or they can share information and operate as an overall system, utilizing multiprocessor hardware or multiple machines on a network for parallel simulation. Finally, the Model Communications Module allows easy communication between models and third-party applications, such as spreadsheets or Visual Basic™ programs.

**Runtime Software**

With an Applied AutoMod Runtime license, “what-if” scenarios can be performed on pre-built models. Users can change parameters, run models and view results in run-time mode. The addition of AutoStat to a Runtime license provides enhanced statistical analysis capability in run-time mode.

**SOFTWARE SUPPORT AND SERVICES**

Applied AutoMod services and support are tailored to meet your needs providing software products for continuous productivity improvement.

**WORLDWIDE CUSTOMER SUPPORT**

Our full-service customer support includes hotline access to qualified technicians to help you troubleshoot problems in your model, provide coaching assistance on how-to questions, and answer questions about Applied AutoMod features and functionality. Applied AutoMod customer support is widely recognized as the most responsive in the industry.

**CONSULTING**

Our applications engineers are considered the most experienced in the world, having completed thousands of projects using Applied AutoMod software. Each engineer completes 10 to 15 projects per year, ranging from totally automated facilities to manual job shops. With this expertise, we can conquer any simulation problem in any industry.

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“The consulting team was very instructive and efficient with modeling our 20,000 square foot center. With the model, we were able to define the supply chain distribution center capacity, test business processes, optimize product location files and use the model as a training tool for managers. Consultants helped the entire process run smoothly and assisted with the interpretation of results.”

— Boise Cascade Office Products