



S I | N T H E S I S TM
Software Suite

Product and Inventory Maintenance

See new possibilities in order fulfillment emerge.TM



Analyze and manage product receiving, storage, retrieval, distribution, and replenishment with the **SINTHESISTM** Product and Inventory Maintenance Modules. The Product Analyzer evaluates the parameters and movement histories of your products and assigns warehousing facilities and storage accommodations best suited for each SKU. Item specifications and activities are reviewed individually as well as globally within the operating environment to determine the most efficient, productive solutions.

SINTHESIS selects locations in reserve inventory, forward picking zones, and automated dispensers for the optimal system throughput. Proactive replenishment of fast-moving products virtually eliminates order shortfalls resulting from stock-outs. Integrated with a full line of extendible modules, **SINTHESIS** creates dynamic order fulfillment processes, from order receipt through order shipment, for distribution centers that provide full-case and split-case, item-oriented fulfillment. And each of these modules can be further customized to deliver even greater productivity in your particular application.

Product and Inventory Maintenance Modules

- Product Analyzer
- Receiving and Putaway Director
- Proactive Replenishment Director

SINTHESIS is the software component of total system solutions for order fulfillment and distribution from SI Systems. With over two dozen innovative, extendible software modules, SINTHESIS software complements enterprise planning systems to accurately facilitate and optimize planning, warehousing, inventory, routing, order fulfillment, and distribution processes for sophisticated, high-volume distribution centers performing full- or split-case picking operations.

Product Analyzer

Finds the most effective physical locations to store items based on volume, size, weight, and packaging configurations. Every product in the warehouse is analyzed and compared to storage constraints for each static or automated picking slot.

- Determines product compatibility for automated picking
- Bases storage slot dimensions on product characteristics and volume
- Analyzes inner-packs and piece items

Receiving and Putaway Director

Manages the receipt of incoming products and stores items in designated inventory locations. Expedites processing and routing of back-ordered items to facilitate shipment of orders on hold.

- Identifies received items via barcodes, weights, and shipping documents
- Verifies receipt against outstanding purchase orders
- Searches for best storage location based on defined parameters
- Creates an inventory transfer order to route items to storage locations
- Directs products to picking locations with low inventory
- Cubes items in totes for automated conveyance to inventory areas

Proactive Replenishment Director

Ensures that high-volume, automated item-dispensing machines, such as Dispen-SI-Matic, are replenished “just-in-time” with the least commitment of manpower. System directed or printed task versions are offered to meet distribution centers’ cultural and system requirements.

- Forecasts item consumption based on pending order content
- Determines the replenishment capability of selected personnel based on historical or target performance data
- Recommends sufficient manpower to achieve timely replenishment results
- Charts and sequences expected replenishment demands by item
- Communicates replenishment tasks to workers via printed lists or interactive computer-directed commands and responses

SYNTHESIS SERVICE AND SUPPORT

SI understands that the success of your business depends on the continuing performance of the systems we build. Therefore, we are committed to providing the highest level of support possible. As part of that commitment, we ensure that the most qualified people are available to answer your questions and assist you during emergencies—whenever and wherever the need arises. Our U.S. base means less travel time—which translates into less downtime for you!

