



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

Resource Planning Modules

See new possibilities in order fulfillment emerge.TM



Maximize item picking efficiency and minimize labor costs by utilizing advance and real-time information to plan, assign, and adjust resources. **SINTHESISTM** Resource Planning Modules evaluate product parameters to assign SKUs to the most efficient warehousing locations. Analysis of historical personnel performance data determines best task assignments and balance of human resources. Comprehensive reporting, advisories, and alerts prompt operations supervisors to adjust fulfillment procedures and manpower levels based on current, real-time status information. Key metrics highlight activities that demand attention to overcome potential compromises to productivity and throughput. 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.

Resource Planning Modules

- Distribution System Optimizer
- Distribution System Wizard
- Manpower Planner
- Diagnostics and Alerts 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.

Distribution System Optimizer

Maximizes item picking efficiency and minimizes labor costs by storing SKU's in the most effective locations in the warehouse. Product order histories and physical characteristics determine the optimal locations.

- Optimally locates SKUs in Dispen-SI-Matic, carousel, and shelf slots
- Automatically pinpoints and displays ineffective slotting assignments
- Recommends location changes and associated productivity improvements
- Issues work orders for re-slotting tasks

Distribution System Wizard

Displays an overview of the order fulfillment events and statistics in a very friendly format. The reports are based on time-stamped order and system process data that is stored on the central database. Supervisors use this real-time information to make quick adjustment to procedures and manpower, thereby improving productivity.

- Portrays order fulfillment system throughput statistics by area and in total
- Displays orders processed per pack station
- Sends orders rejected or incomplete alerts, sorted by picking area
- Provides a single source for all diagnostics for an order
- Summarizes orders completed by picking area

Diagnostics and Alerts Director

Presents an organized, structured display of all diagnostics and alerts that are generated by other **SINTHESIS** software modules. Provides an invaluable aid to supervisory personnel in pinpointing and resolving system problems.

- Monitors and tracks the movement of all items and signals alerts immediately when inefficiencies are detected
- Monitors A-frame and alerts when under-utilization or incorrect slotting is detected
- Signals urgent alerts with pop-up message boxes or via e-mail
- Logs events of various types from other modules and stores them in easy-access database
- Stores events logs with brief descriptions, date and time stamps

Manpower Planner

Forecasts the minimum number of personnel required per work area for each scheduled hour of order fulfillment activity. Uses historical performance of workers and the actual pending order content to determine required manpower for A-frame replenishment and packing stations.

- Displays staffing recommendations prior to and during a picking wave
- Updates forecasts as actual order fulfillment performance progresses
- Injects individual's actual performance statistics provided by other **SINTHESIS** software modules

SINTHESIS 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!

