## **Automated Replenishment**

**Prevent lost sales, minimize costs, and maximize efficiency** with ToolsGroup Automated Replenishment software.

#### // Solution at a Glance

ToolsGroup Automated Replenishment software calculates optimal inventory levels for both existing and new items. As a result, you can create a time-phased plan that achieves optimal inventory levels, even in the face of demand variability and distribution complexity.

#### // Key Features and Benefits

- Minimize the bullwhip effect with increased visibility into the latest requirements
- Rapidly calculate the allocation of stock to stores (point of sale)
- Execute short, medium and long-range planning with the same dataset
- Optimize resources while maintaining inventory levels – demand-driven requirements are smoothly propagated upstream, and proposals consider operational constraints
- Configure effective days for shipping and receiving at the warehouse and from the suppliers to improve proposal shipping and due dates
- Generate feasible replenishment plans on the basis of available production capacity

## Automated Replenishment: Take the guesswork out of maintaining the optimal inventory balance in your supply chain, preventing lost sales and minimizing costs.

Replenishment decisions can make or break retailers and distributors, yet many inventory planning approaches aren't well suited for companies with challenging distribution problems.

Profit margins and customer loyalty depend on making the most optimal trade-offs every day, but getting the balance right can feel as unlikely as winning the lottery. Replenishing fast-moving commodity items can be complex and highly variable when you try to forecast demand by SKU, by store, and by day. When replenishing new or one-time buys, and factoring in promotions and other demand-shaping variables, the number of possible trade-offs is practically infinite.

Spreadsheets and legacy planning systems that rely on aggregated sales histories can't handle this complexity or cope with today's multi-channel and seasonal planning challenges. As a result, companies may not have an efficient inventory mix.

ToolsGroup applies advanced algorithms and Al to provide highly accurate, time-phased replenishment plans that achieve target service levels.

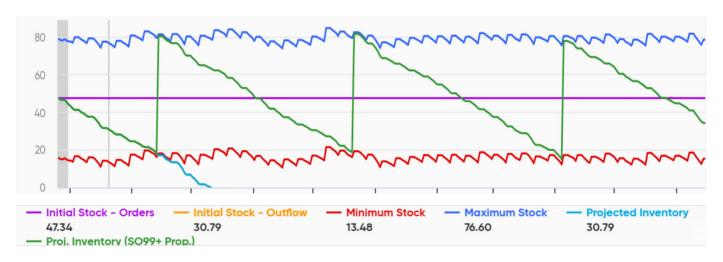
# Auto-Replenish Inventory to Maintain Ideal Stock Levels and Maximum Revenue

/ Service-Driven Planning: The complexity, time pressures, and educated guesswork involved in merchandise planning invariably lead to either too much safety stock or unmet service levels. Our automated replenishment takes away the guesswork, recommending optimal ship-to quantities down to the store level.

Forecasts are continually updated on a rolling, time-phased basis, factoring in changing demand signals, including pricing, promotions, and seasonality. Replenishment plans consider numerous supply constraints, such as lead times, supplier minimums, and capacity issues. The result? Planners meet service level targets without building excess inventory in the supply chain.

/ Machine Learning to Manage Complexity: ToolsGroup demand sensing capabilities enable planners to be more proactive when planning items with short life cycles. By factoring in point-of-sale data, our solution uses machine learning to generate an early warning replenishment signal that identifies which items are "runners" and which are "laggards." This gives planners the advance warning they need in determining whether to hold back more (or less) inventory upstream.

/ Distribution Requirement Tunnels: Our requirement tunnel calculates the aggregate maximum and minimum inventory needs with time-phased curves that ensure your ability to maintain the desired service level across time. These aggregated needs by SKU-Location consider various criteria and constraints related to manufacturing, buying, and transporting, and allow you to slice the data and view by production or transportation resources.



Tunnel Display displays the results of the planning tunnel calculation. The graph illustrates the evolution of the stock and inventory flows and levels over time.

### **ToolsGroup Automated Replenishment Capabilities**

/ Rapid Store Replenishment: Our store replenishment is designed to optimize store allocation decisions by quickly calculating a large number of transfer proposals for many items across many stores. At the same time, the system leverages current product availability, forecasts, time-phased requirements, and existing constraints on the proposals.

/ 3D Truck Load Optimization: ToolsGroup automatic optimization creates shipment orders that are more effective at filling trucks and require fewer loads over the year-without impacting inventory. The system uses a variety of information including time-phased demand, product dimensions, and weight. Identifying how inventory is palletized and its "stackability" also determines how to best use the valuable lanespecific truck capacity.

/ Custom Reporting and Preventative Alerts: While our replenishment solution is fully automated, sometimes you want the ability to customize alerts to identify and manage specific exceptions. With the ToolsGroup Report Designer, you can create custom reports to check the data loaded and the output at both aggregated and detailed levels.

The Report Designer allows you to create, save and manage queries and reports on the application database tables, enabling you to monitor the most important metrics for your business. Preventative alerts provide pre-configured reports that help you identify critical situations and empower a "management by exception" approach. This saves you valuable time and allows you to focus on what matters most.



### **Go Beyond Automated Replenishment Software**

**Explore more ways** to surpass the competition with the end-to-end solution that maximizes margins and customer experience.

# Optimize supply chain and retail planning from production to purchase



Learn more about how to minimize wasted spend, maximize profits, and optimize your inventory:

Book Your Demo Today →