Service Optimizer 99+

Service-Driven Supply Chain Planning Software
In a market of growing demand volatility and higher service expectations, too many planners find themselves caught in a cycle of inaccurate forecasts, excess and obsolete inventory and “firefighting”. ToolsGroup offers a fundamentally different approach: make that supply chain uncertainty work for you instead of against you, with service-driven planning powered by Service Optimizer 99+ (SO99+).

The SO99+ service-driven planning platform automates and optimizes supply chain planning tasks to meet target service levels. It’s uniquely capable of addressing the challenges of today’s complex supply chains, like:

- Intermittent demand
- Poor forecast accuracy
- Out-of-stocks and lost sales
- Global inventories out of line with working capital goals
- Too many “exceptions” causing constant expediting
- Missing the service levels your customers expect

SO99+ solves these problems with powerful demand analytics and multi-echelon inventory optimization.

ToolsGroup SO99+ calculates optimal plans by orchestrating all your planning variables using advanced algorithms and self-learning AI technology. You specify the service level and relax knowing you’ll reach the service levels your customers expect at the lowest possible cost.

/Tackle the Long-Tail Demand Challenge
Product proliferation is causing demand buckets to get smaller, creating more alternatives and shorter replenishment cycles. That results in increased demand variability and hurts supply chain effectiveness. Uncertainty modeling in SO99+ is uniquely capable of handling intermittent or “long tail” demand patterns.

/Decode Demand Uncertainty
SO99+ incorporates uncertainty modeling across a range of supply chain planning functions, from demand forecasting to inventory and replenishment. SO99’s probability-based forecasting identifies a range of outcomes and the probability of each of those outcomes occurring, so it can calculate optimal inventory targets.
/ Achieve a Smarter Stock Mix
With probability forecasting you can better understand specific demand patterns for both fast and slow-moving items to achieve aggressive service level targets with minimal inventory. SO99’s inventory system creates a stock to service curve for each SKU/Location combination so you can optimize service mix across your product portfolio in ways that maximize service and minimize inventory.

/ Automate Planning Tasks with Powerful Integrated AI
Our fully-integrated machine learning engine not only factors in traditional planning inputs like past order history, but also data from CRM systems and external sources such as weather, POS, social media, IoT, etc. Planners benefit by allowing the system to automate routine tasks so they can focus on driving business value rather than manipulating demand forecasts.
Service Optimizer 99+
Service-Driven Planning Platform

SO99+ calculates optimal service mix across your products to maximize service levels and minimize inventory. We do it by orchestrating all your planning variables using advanced algorithms and self-learning AI technology.

Demand Planning and Sensing
Unlike other solutions which put the burden on the user to apply various forecasting models, SO99+ employs a single, self-adaptive method that models uncertainty for all items—slow and fast movers. Our probability-based forecasting approach automatically generates a range of possible inventory levels for each SKU-Location with high and low limits—just like a weather forecast.
Inventory Optimization
Probability forecasting identifies a range of demand outcomes and the probability of each of those outcomes occurring. SO99+ uses this information to calculate the optimal inventory targets. Unlike other applications which assign a global service target or safety stock level to each item, SO99+ identifies a different service and inventory target for each SKU/Location. The exchange curve shows the average inventory required (as well as the corresponding safety stock, re-order level and order up to level), enabling planners to understand the trade-off between inventory and fill rate. It displays the relationship between stock and service across a wide range of relevant parameters, even for very high service levels, and for both fast movers and lumpy/intermittent “long tail” demand.

The result is service levels and replenishment policies matched appropriately to each item-location in your SKU portfolio. You achieve target service levels and retain customers while minimizing inventory and other costs.

Simulate Your Inventory Plan for Added Confidence
Once you've built your inventory plan you can test how it will deliver service and inventory levels in the future, when market conditions change and new demand signals hit. SO99+ allows you to simulate the past under different inventory policies to see how they would have performed. This feature, with its visual animation, allows you to confirm and validate that your supply chain solution is delivering to the parameters you set.

Allocation & Replenishment
SO99+ dynamically replenishes optimal inventory at each node to guarantee the planned service level in a multi-echelon network.
and defines the right mix of requirements to feed production and other upstream processes (such as Purchasing). It automatically creates constrained replenishment proposals and addresses limited capacity constraints by rough cut capacity planning, which allows the optimal mix to be pre-built for seasonal demand.

**Use Digital Twins for Better Decision Making**

A digital twin is the ultimate what-if scenario planner. It allows you to accurately test the resilience of a complex, multi-echelon, global supply chain. Because SO99+ models the entire supply chain starting from the demand signal through supply, you can build a digital twin to measure the impact of supply chain disruptions, or precisely predict the impact of sales promotions on demand, and inventory trade-offs on customer service levels.

/** S&OP**

Whether you’re just getting started with S&OP, or are ready for more advanced capabilities, ToolsGroup has you covered.

- **Our Demand Collaboration Hub (DCH)** is a great way to get started with S&OP processes by bringing together internal and external stakeholders to make informed strategic and tactical decisions to balance supply and demand, and implement those decisions into daily execution.

- **ToolsGroup’s full S&OP solution** complements the SO99+ platform by supporting the definition of demand-driven production and procurement plans. Create and compare scenarios and develop custom business workflows to ensure you can execute what you plan—with the highest service and the lowest cost.

**Promotions Planning and Machine Learning Make a Perfect Pair**

Our promotion planning solution gives marketing professionals a powerful yet easy-to-use tool to view and scenario-plan campaigns and promotions in synch with supply chain operations. The forecasted impact of marketing’s campaigns on the baseline forecast are fed back into operations teams, so they can adjust their plans accordingly. Machine learning offers added horsepower to improve demand forecasting accuracy by going beyond historical sales data to blend in data about the uplift and ROI of past promotional campaigns.
<table>
<thead>
<tr>
<th>Company</th>
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<td>20+ Service Point Increase</td>
<td>25% Increase in Inventory Turns</td>
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<td>40% Reduction in Lead Time</td>
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ToolsGroup is the leading provider of service-driven supply chain planning automation solutions for retailers, distributors, and manufacturers. Learn more at toolsgroup.com