Inventory Optimization

ToolsGroup **Service Optimizer 99+ (SO99+)** inventory optimization routinely generates million-dollar ROIs through increased service levels, reduced stock-outs and improved inventory turns.
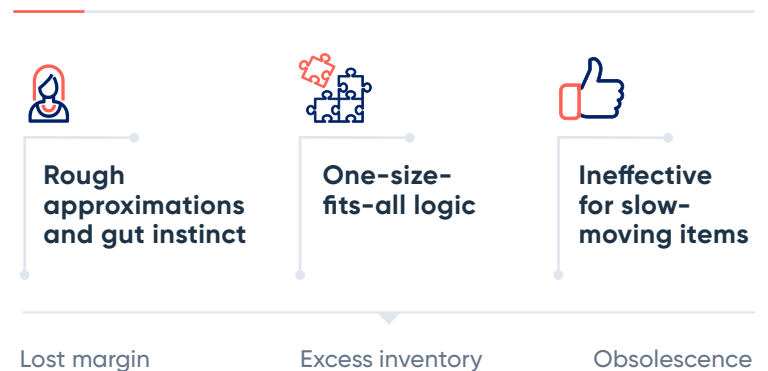
// Inventory Optimization at a Glance

ToolsGroup's self-adaptive demand and inventory models automatically define the optimal mix of inventory across the multi-echelon supply chain to achieve aggressive service level targets with minimal inventory. Our customers routinely achieve millions of dollars in savings via increased service levels, reduced stock-outs and improved inventory turns.

// Key Benefits

- Best inventory optimization for uncertain demand environments
- Easy-to-use, intelligent inventory optimization platform in the cloud
- Guaranteed high service levels at lowest cost
- Frees up working capital by reducing inventory levels by 15-30%

"Despite its power and level of sophistication, ToolsGroup MEIO is highly automated for an extremely low cost of ownership." - IDC[1]

Traditional Inventory Approaches Create Stock-outs and Waste

Rough approximations and gut instinct	One-size-fits-all logic	Ineffective for slow-moving items
Lost margin	Excess inventory	Obsolescence

Today, companies are carrying more slow-moving items with unpredictable demand patterns. Consumers demand more options, and SKU counts are skyrocketing. Typical inventory "segmentation" approaches group SKU-Locations (SKU-L) into arbitrary "segments" and then apply "one-size-fits-all" logic by assigning all SKU-Ls within each segment the same service level target. The result is that inventory mixes are wrong. Some products are being over-served, locking up precious working capital, while others are being under-served, causing reduced sales and market penetration. This creates a significant opportunity to improve both your top and bottom line.

15-30%

ToolsGroup customers commonly see inventory reductions of 15-30%

ToolsGroup Takes a Different Approach to Inventory Optimization: Decode Demand Uncertainty to Reduce Inventory Risk

ToolsGroup inventory optimization is different. Instead of rough approximations and one-size-fits-all logic, our solution automatically assigns a different service target to each individual SKU-L, achieving the desired global service level while simultaneously pinpointing the optimum solution to meet your business goals: minimize inventory, storage space, obsolescence; maximize net margin, freshness and more.

/ Engineered for demand uncertainty: Our probabilistic forecast provides the foundation for advanced inventory modeling, and helps you manage the risk that comes from demand volatility. Our forecast provides a range of possible values with their probability of occurrence. When dealing with slow movers and "long-tail" demand, this information is essential to make the correct decisions in a highly uncertain environment. Advanced machine learning capabilities enhance traditional demand forecasts by modelling internal sources of noise and incorporating the effect of external data.
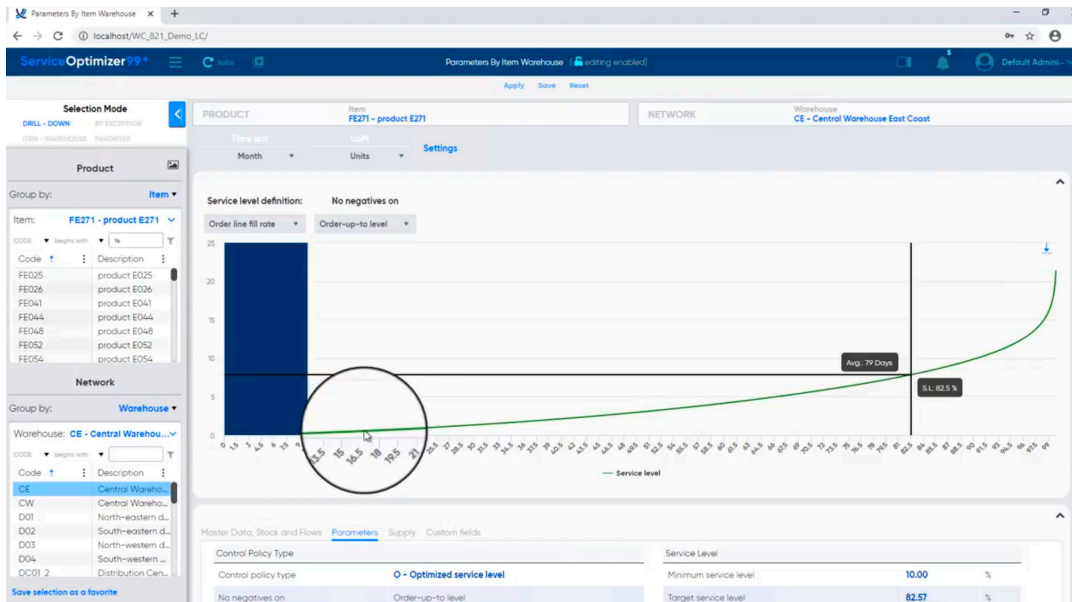
/ Modeling for slow-movers and intermittent demand: When managing slow-moving and intermittent demand items, ToolsGroup is incomparably better than other solutions. Our proprietary analytical relationships between inventory and customer service levels have proven to be highly reliable, even for very slow moving and intermittent demand items. This allows the system to optimize even very large assortments, including products in the "long tail", balancing inventories across different locations and different levels in the bill of materials (BOM).

/ Precise inventory modeling: Our unique inventory modeling technology eliminates the gross approximations of traditional inventory management theory, creating very reliable relationships between average inventory and service levels for each SKU-L. This allows our inventory optimization to define the optimal inventory mix across your products and network to satisfy the service plan.

/ Individualized service level: Instead of creating a "one-size-fits-all" inventory mix within item groups that are defined with rudimentary classification criteria, our inventory optimization approach differentiates service and inventory targets across products, bill-of-materials levels and distribution network locations to efficiently meet your desired customer service level objectives. By identifying different service level targets for each individual SKU-L, you can achieve a blended service level target which is globally in line with your business objectives, but at the same time optimizes your other chosen objective functions such as: minimize inventory, maximize margin, reduce obsolescence risk and more.

/ Multi-echelon inventory optimization (MEIO): Our MEIO solution proposes optimal inventory levels at each stage of the supply chain, simultaneously balancing across multiple echelons, locations and different levels.

Using probability forecast, supply parameters (lead time, order frequency, minimum order quantities), and service level, SO99+ will generate a unique "stock to service curve" that gives you the ability to trade off service level against inventory requirements needed to meet a given target.

Choose your fit

ToolsGroup inventory optimization is available in the cloud or as a cost-effective managed service.

Service-Level Planning Drives Inventory Benefits

Optimized inventory balance across different items, echelons, locations, bill-of-materials levels, and service level agreements

- Increased service levels
- Greater supply chain agility
- Higher sales volume
- Reduced operating costs
- Improved inventory turns

Leading Companies Are Ready for Anything with ToolsGroup

ToolsGroup is how organizations achieve their target service levels while optimizing inventory—no matter how complex their supply chain is or how much demand changes. That way, they can be ready for anything.

BOISE

- Reduced inventory by over 20%
- Improved service level by three full points

"We had one customer re-up because we could provide them service they couldn't get anywhere else. And we accomplished it without increasing inventory or manufacturing capacity."

- Dale Groetsema, Supply Chain Leader for Boise

O₂

- Improved forecast accuracy by 10%
- Decreased days of stock by nearly 30%
- Raised handset availability service levels to 97% in the warehouse and 96% in retail stores

"ToolsGroup has proven to be an ideal partner in helping O2 plan a supply chain that can respond to changes in demand."

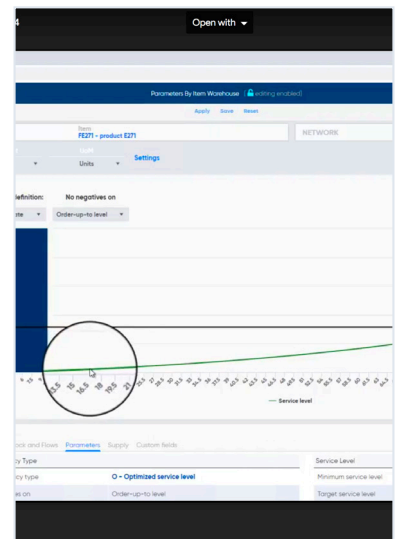- David Flaxten, Demand Planning Manager, O2 UK

- Reduced inventory 20-30% without compromising their 96-97% service levels (well above industry benchmark)
- Rush air shipments slashed by a third

"My only regret now is not upgrading sooner! I'm immensely proud to be passing on a highly efficient, productive spare parts operation that provides exceptional service and is ready for the future."

- Shalom Asayag, Service and Aftermarket Director, Lubinski

Service Optimizer 99+ Platform for Service-Driven Planning

Download our brochure to see our entire Service Optimizer 99+ service-driven planning suite.

Demand Forecasting & Planning	Demand Sensing	Promotions Planning	Inventory Optimization
Supply Planning & Optimization	Production & Capacity Planning	Allocation & Replenishment	S&OP

(1) IDC MarketScape for Worldwide Supply Chain Inventory Optimization, 2019