# Is Your Aftermarket Parts Supply Chain Ready for Anything?



**V toolsgroup**<sup>®</sup> | Be ready for anything<sup>™</sup>



In the aftermarket parts industry, you're facing the triple threat of product, supply chain, and service complexity. The pressure is on, and the stakes–and potential rewards–have never been higher.

Aftermarket

#### / Increasing complexity and supply uncertainty

In a distribution and service-intensive industry, positioning inventory across different levels of the global supply network is a huge challenge. At the same time vendors are diverse and supply is often constrained or uncertain.

#### / Long-tail demand and part proliferation

Fast-moving products are easy to forecast. The slow and intermittent movers in the "long tail"-a growing part of the aftermarket business-are another story. Traditional supply chain applications are not designed for high variability demand, so inventory mixes and service levels get out of balance, leading to excessive costs, waste and obsolescence. Part proliferation also makes it very difficult for distributors to economically carry the right inventory.

#### / Fierce competition and escalating service expectations

Driven by the older age of cars on the road, the automotive aftermarket sector is expected to grow from its current value of approximately \$1 trillion to more than \$1.42 trillion by 2024.<sup>1</sup> To beat the competition you need to deliver exceptional service—but finding the right service/inventory balance is elusive with diverse products and businesses, and differentiated support agreements. Aftermarket Companies Like These Trust ToolsGroup ToolsGroup is how aftermarket parts manufacturers and distributors 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.



🕃 Pilkington

**№ BorgWarner** 



Deliver Exceptional Service Profitably, Even With Uncertain Demand Profitability in the aftermarket industry is a balancing act. While others focus on forecast accuracy, ToolsGroup focuses on the ultimate goal—service-level delivery. With ToolsGroup Service Optimizer 99+ (SO99+), set your service levels and relax knowing you'll meet them with the minimum inventory investment.

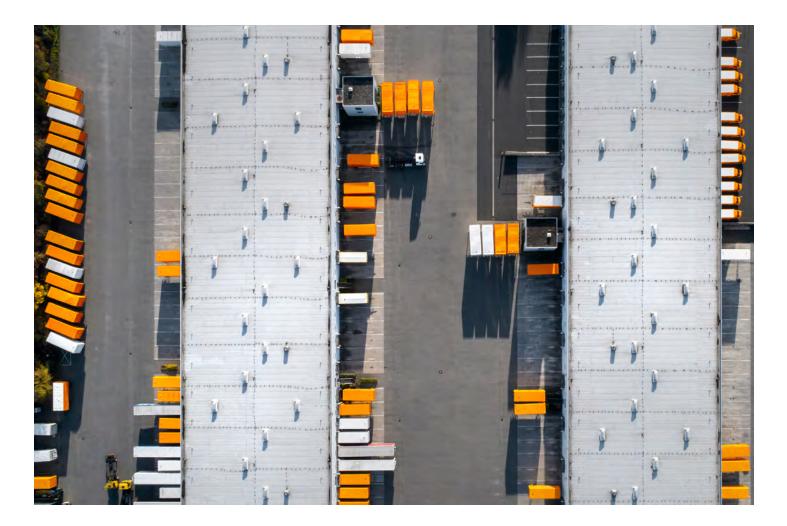
Our Aftermarket Customers Commonly Achieve:

**10–30%** Reduction in inventory and improved inventory turns

**95-99%** Service levels

**20–50%** Reduction in lost sales

50–90% Reduction in planner workload with machinelearning automation





Aftermarket Parts: What Being Ready for Anything Looks Like Aftermarket supply chains are characterized by multi-tier distribution networks with large volumes of part numbers and intermittent demand. Traditional supply chain planning solutions don't address the "long tail" problem, so it's especially difficult to maintain high service levels across differentiated channels. ToolsGroup solves this service parts planning problem with an exceptional ability to forecast intermittent demand and optimize multi-echelon inventory.



Accurately forecast intermittent and long-tail demand



Plan across an extended multi-echelon distribution network



Achieve high service levels while reducing inventory



Manage planning across the product life cycle: new product introduction, product replacement, supersession, end of life



Scenario plan to understand inventory and margin impact of planning and policy decisions

### How ToolsGroup Stands Apart in Supply Chain Planning



#### / Service-driven planning

The SO99+ service-driven planning software automates and optimizes supply chain planning tasks to meet target service levels. We calculate optimal plans by orchestrating all your planning variables using advanced algorithms and selflearning machine learning technology. You specify the service level and relax knowing you'll reach the service levels your customers expect at the lowest possible cost. With SO99+ you can also:

- Easily plan service level by line, so you can set a higher service level for products like brake pads than you do for cosmetic automotive parts.
- Choose between service time and service level: Identify the parts that can be serviced from a central hub at a higher service level, giving you a powerful competitive advantage.

### / Pioneering machine learning in supply chain planning

Our innovative machine learning engine was designed specifically for supply chain planning, and especially to improve demand forecasting. Within our machine learning engine we incorporate deep learning technology that allows our models to "learn" from existing data and accurately identify future demand trends. It leverages the knowledge, experience and skills of planners and other experts in a highly efficient and effective way, working like an intelligent assistant that helps them do their normal jobs much more effectively.

#### / Probabilistic forecasting

Our probabilistic forecasting method incorporates uncertainty modeling across a range of supply chain planning functions, from demand forecasting to inventory and replenishment/ master planning. It offers a new approach where the variability of the supply chain is integrally modeled in the planning and optimization functions, across the end-to-end supply chain. In addition, this uncertainty modeling provides the ability to handle intermittent or "long tail" demand patterns which are becoming more common due to part proliferation and rapid replenishment cycles.

#### / Single, unified model for end-to-end planning

SO99+ was designed from the beginning as a single, unified model for an end-to-end planning process. All of our solutions

are built from the same detailed model of demand and supply. Rather than thrown together and dressed up to look the same, our solutions were all born from the same DNA. The net result is an end-to-end process that minimizes the bullwhip effect, scales easily, and provides deep insight into demand signals, inventory behaviors and supply chain volatility.

# / Highly automated solution means your planners are more productive

Our highly automated software ensures that your planners can be more productive at the strategy level instead of spending time putting out fires. Rather than a manually-intensive decision support tool, SO99+ is a solution to which planners can delegate much of the number-crunching, data manipulation and other grunt work. The result is a dramatic improvement in planner productivity and value-added work.

### **Supply Chain Planning Solutions for Aftermarket Parts**

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Demand Sensing	Inventory	<u>₽₿₽</u>	
	Optimization	Supply Planning	Production Planning & Scheduling
<ul> <li>Promotions Planning</li> <li>New Product Introduction</li> <li>External Demand Causals</li> <li>Early Signal Analysis</li> <li>Demand Collaboration</li> </ul>	<ul> <li>Service Level Optimization</li> <li>Multi-Echelon Inventory Optimization</li> <li>Mix, Stage &amp; Lot Size Optimization</li> <li>Inventory Modeling</li> </ul>	<ul> <li>Allocation &amp; Replenishment</li> <li>Dynamic Min/ Max Projected Requirements</li> <li>Monitoring &amp; Visibility</li> <li>Supply Collaboration</li> </ul>	<ul> <li>MPS</li> <li>Finite Capacity Plan</li> <li>ATP</li> <li>Production Scheduling</li> <li>MES</li> </ul>
Microsoft Dynamics 365	ORACLE	Plus any third-pa	rty data sources
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Azure





Reduced the inventory value of its safety stock on clustered items by 18% Immediately improved FTA service levels to 97.1%, above its target

"In a luxury business like ours, nothing affects team morale more than our ability to meet service requirements. Thanks to ToolsGroup applying its machine learning technology to our problem in a creative way, we're now much better geared up to serve our demanding client base without impacting our bottom line."

- Nick Wilson, Senior Inventory Planner, Parts Operations

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Reduced inventory by 15 percentage points



Boosted service levels by 10 percentage points



"Now we can focus on more added-value work because the data crunching doesn't consume any time on our end. It's a good interaction between humans and machines. We let the machines do the dirty job, the one where humans don't add value and actually sometimes get things wrong."

- Ilaria Maruccia, EMEA WG & PGA SIOP Manager







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



Get Up and Running Fast With Our Turnkey Planning Solution



We're proud to back your service parts supply chain with 40 years of industry and technology experience. In 1976, Eugenio Cornacchia, a young MIT master's graduate in Operations Management began work on a challenging project for Fiat's Automotive Spare Parts Division which proved to be decades ahead of its time. Since then we've grown into a major influencer in supply chain planning, supporting many thriving aftermarket parts organizations. Our industry experts continue to drive ToolsGroup forward with a combined commitment to technology innovation and customer results.

With tight margins, timelines and budgets, we know aftermarket companies don't have time to wait for six to eight months to improve planning results. With implementations as short as three months, you'll deliver significant business value in a fraction of the time of traditional deployments.

# Try our tools to help you build a powerful business case for service-driven planning:

#### // Online Benefit Calculator

Got 10 minutes? Take our online benefit assessment for a fast, accurate estimate of your supply chain planning opportunity in the areas of revenue, net profit, inventory reduction and inventory holding cost. <u>Try benefit calculator</u>

#### // Guided Supply Chain Assessment

This service provides a rapid assessment of supply chain health and delivers practical and quantifiable evidence of opportunity for improved business outcomes.