

Vendor Managed Inventory

A Better Approach to VMI

ToolsGroup offers a demand-driven VMI replenishment engine that captures the demand signal and both manages and optimizes the vendor managed inventory planning process.

ToolsGroup's VMI solution calculates a forecast based on demand input and market intelligence. It then automatically generates daily replenishment proposals to meet pre-defined target service levels (fill rates) for each SKU-Location. Optimal loads are calculated for each truckload.

The solution consistently delivers on-target service levels without significant manual intervention. It allows users to reliably achieve service levels up to 99+% without excessive expediting, and with far fewer exceptions, improved retailer/supplier relationships and increased planner productivity.

A Powerful, Compact Solution

ToolsGroup's VMI offering delivers four important functions in a powerful, compact solution:

- Demand Modeling & Demand Planning
- Inventory Planning
- Replenishment Planning
- Performance Measurement

Demand Modeling produces reliable and robust daily forecasts using comprehensive, highly automated, and self-adaptive statistical modeling:

- Uniquely models demand for each "Ship To" Location
- Models both order-lines and quantities for greater accuracy

Demand Planning adds market intelligence by modeling promotions and their lift. It includes:

- Causal factors/external profiles
- Launch profiles for new product introductions
- Operates on a daily level with a real calendar underneath – automatically identifies days within the weeks, weeks with the months, and seasonality

Inventory Planning calculates inventories required to deliver promised customer-service levels. Rather than simply replenishing to a fixed inventory target, manufacturers can define service-level policies (SLAs) with retailers and dynamically calculate optimal inventory targets to comply. It can optimize against objective functions such as inventory holding cost, storage space, net margin, or residual shelf-life.

Replenishment Planning generates daily requirements per SKU-Location. Statistical modeling creates a min-max “tunnel” with a range of replenishment options. By leveraging the tunnel’s flexibility, it can build full truckloads (or minimum supplier quantities) that guarantee the lowest cost of transportation.

- Supports store-level replenishment (if reliable perpetual inventory levels are available) via multi-tier scalability
- Can simultaneously plan multiple supply chain structures and flow paths and also dynamically modify them (e.g., moving a SKU from one flow path to an optimal one)
- All planning is done considering material availability

Performance Measurement allows reports to be configured based on the entire data model. Standard reporting includes:

- Predictive KPIs measure lost net margin due to overstocks and projected stockouts
- Time-phased projection of inventory levels identifies possible transportation cost and working capital reduction
- Web collaboration tool allows users to collaborate on forecasts

Summary of Benefits

- Consistently and reliably delivers on-target service levels of 99+%
- Eliminates significant manual intervention and excessive expediting
- Improves retailer/supplier relationships and increases productivity