NETSTOCK

Inventory Planning Success: A Five-Step Approach for Manufacturers

> **Optimize inventory, streamline operations and capacity planning, and unlock your business's potential.**

A practical approach for manufacturers to navigate supply chain disruptions by enhancing inventory visibility, improving forecasting accuracy, and leveraging technology.

What's in this guide.

1. Introduction

What's impacting manufacturers in their supply chain?

The supply chain is the backbone of the manufacturing industry. One delay will cause a knock-on effect that eventually impacts the consumer.

Manufacturers are navigating a complex landscape heavily influenced by the COVID-19 pandemic. Successfully addressing these ongoing challenges is crucial for manufacturers to maintain operational resilience, meet customer expectations, and stay competitive in the evolving global market.

Ongoing challenges...

Rising transportation costs and logistics challenges. Manufacturers need time to secure favorable contracts and explore alternative transportation options due to increasing shipping demands, container shortages, and vessel unavailability, resulting in delays and higher freight rates.

Unreliable suppliers. A supplier's quality, reliability, and timelines impact manufacturing and product quality. Unreliable suppliers cause delays, increased expenses, and compromised quality. Careful supplier selection and management are critical to meeting demand.

Volatility in raw material prices. Fluctuations in commodity prices, such as metals, plastics, and energy, can impact the profitability and cost-effectiveness of manufacturing processes. Manufacturers must monitor and adapt to these price fluctuations to maintain their competitive edge and financial stability.

Sustainability and environmental concerns. Consumers and regulatory bodies demand greener and more sustainable products and practices. Manufacturers must evaluate their supply chain processes, reduce carbon emissions, optimize energy usage, and adopt eco-friendly materials and packaging solutions.

The rapid advancement of technology. AI, robotics, and automation are transforming manufacturing. Manufacturers must adapt, upgrade infrastructure, retrain workers, and ensure data security to harness their benefits.

2. A five-step approach to inventory success

Step 1: Increase visibility

Focus on what matters

Inventory visibility is critical, allowing businesses to **monitor and manage their stock levels accurately, reducing the risk of stock-outs, excess stock, and incurring unnecessary hidden costs in your supply chain**. With ongoing disruptions, setting the necessary inventory Key Performance Indicators [KPIs] ensures you make the right inventory decisions to serve your customers on time and in full. The more volatile the supply chain becomes, the more regularly you should review and measure your KPIs to help plan your inventory accordingly.

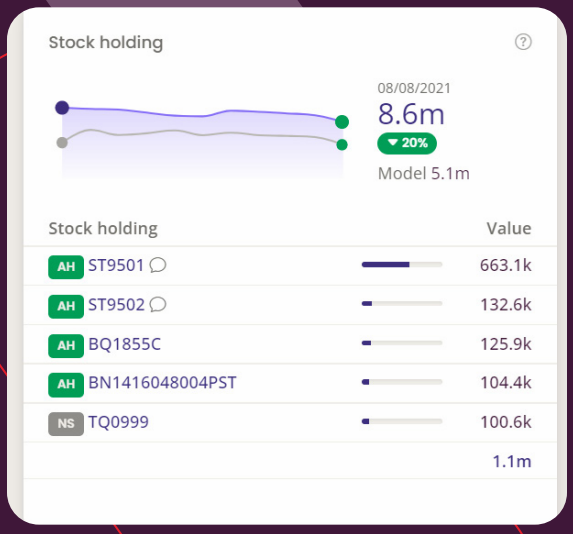
You need the right inventory KPIs in place!

Inventory KPIs are like a compass for your business. Just as a compass helps navigate the right direction, inventory KPIs provide valuable guidance and affect the overall performance and visibility of your inventory holding. At Netstock, we divide inventory KPIs into two parts: 1) Stock holding; 2) Fill rate

1) Stock holding

The amount of inventory a business keeps for future use compared to an ideal model.

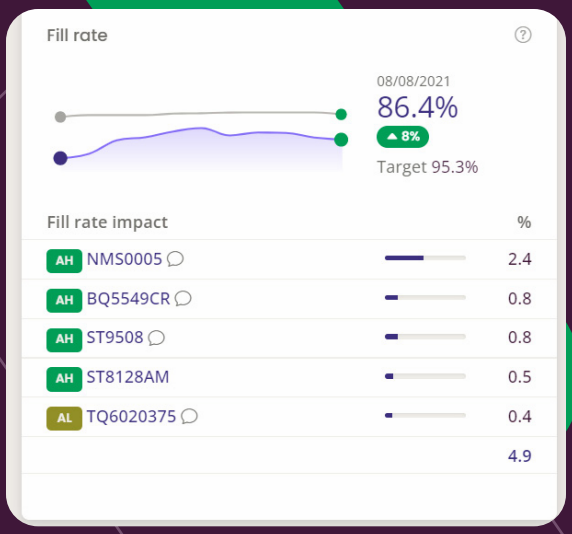
a. What is your inventory value compared to the benchmark in your industry?
b. Where are you in excess?
c. Where are you ordering too much of an item which, resulting in excess stock?



2) Fill rate

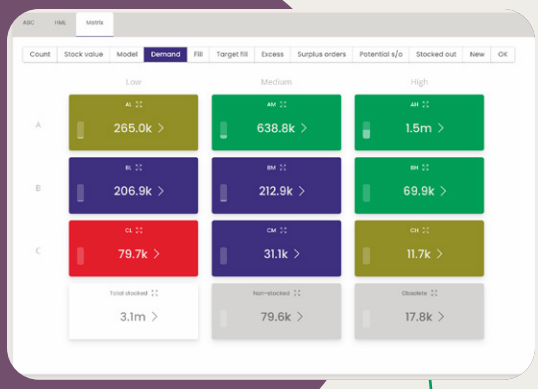
The percentage of demand met by immediate stock availability. Track how well you're servicing your existing customer base compared to what you're targeting.

a. Measuring the fill rate and how well you serve your customers.
b. When and where do stock-outs occur?
c. Where will you potentially stock out, and when will you run out of stock?
d. Where are you forecasting too much or too little? If you forecast too much, you'll have excess stock. If you don't forecast enough, potential stock-outs will occur.



How to set, refine and track inventory KPIs

When you start looking at your inventory, you need to know the value of your inventory holding in your business relative to how much excess stock you have. Is your inventory value increasing or decreasing?



It's vital to...

- **Classify your items** by looking at each item's value and velocity.
- **Understand your fill rate targets** and track towards them. If you keep getting closer to the target, then you know you are going in the right direction.
- **Measure your inventory value** and compare it to previous periods respectively.
- **Keep tracking it.** Know what you want to measure, your target, and how it changes over time.

CUSTOMER STORY | CRAZY AARON'S

Netstock recognizes that you can't look at every item daily, so it focuses on the most important and profitable items. The dashboard gives you a high-level view of total stock holding, excess stock, stock-outs, and potential stock-outs. We can quickly see where the pain points are and what action we need to take.

Crazy Aaron's

Read the Crazy Aaron's story

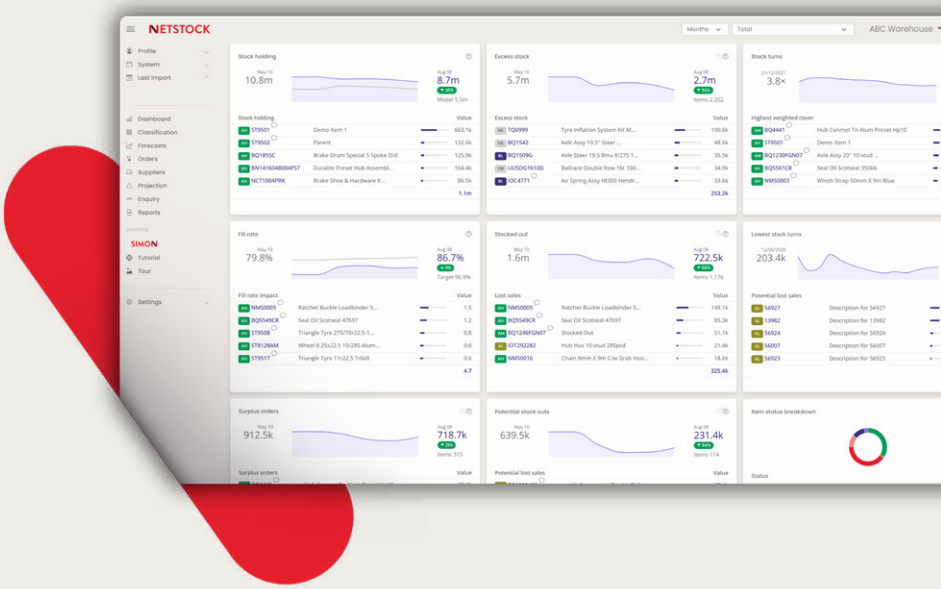
Crazy Aaron's has visibility up and down the value chain.

Netstock's personalized and prioritized **dashboards** are pre-configured to show you the KPIs and metrics that matter most for your business. Easily track performance. **See the top 5 SKUs under each KPI, such as stock-outs, excess stock, fill rate, and their classification** to focus on actions that make the most significant business impact.

Curious about the Health of your Inventory?

Take the Netstock Inventory Health Quiz

Health Quiz



Step 2: Monitor suppliers

Collaborate with top suppliers

Ask yourself these two questions...

#1. Is your supply chain set up to help serve your customers?

#2. How can your inventory data help you plan more efficiently with your suppliers?

Understand your current supplier network to mitigate potential risks

Analyze your supplier data, make the necessary changes, and implement them across your supply chain. **Having that granular insight into your supply chain ecosystem is vital**, from placing the first purchase order through to delivering your customer, it will help you plan around problem areas and identify opportunities for change.

Measure supplier performance and understand potential risks

You can control your supply more efficiently and reduce supply risk by learning everything you can about your suppliers! Being able to extract supplier data, you can monitor and measure your supplier's performance. **The key objective is to reduce long lead times to prevent you from over-ordering and incurring excess stock**.

Measure supplier performance:

- **Create an overview** of your supplier network taking note of their manufacturing and distribution locations.
- **Review the readiness of your suppliers** and what contingency measures they have in place when they can't deliver on time and in full.
- **Understand the flow of goods and the logistics involved.** Often a supplier will use more than one transport route. How will that affect lead times and cost?
- **Identify where you have experienced delays** in shipping, manufacturing, or experienced shortages of certain materials.
- **Regularly review how your suppliers perform,** noting who delivers on time and in full? Pay special attention to those who supply your key items.
- **Know the value of your open purchase orders** for each supplier.
- **Review how much you spend** with each supplier over a 12-24 month period.
- **Find out what security measures** your suppliers have in place to prevent cyberattacks.

CUSTOMER STORY | ZHIK

Zhik reduced long lead times and high MOQ items.

> *Implementing Netstock along with other process changes, allowed us to complete our annual order cycle with our suppliers ahead of their annual production capacity peak periods. This would not have gone as smoothly and efficiently as it did if we didn't have Netstock in place.*
>
> Zhik

Read Zhik's story

Five tips to strengthen supplier relationships

Cultivating a strong relationship with your suppliers requires consistent effort and a genuine commitment to mutual success.

1. **Regular communication:** Establish open and transparent lines of communication with your suppliers. Regularly share information about your business needs, goals, and any changes that may affect them.

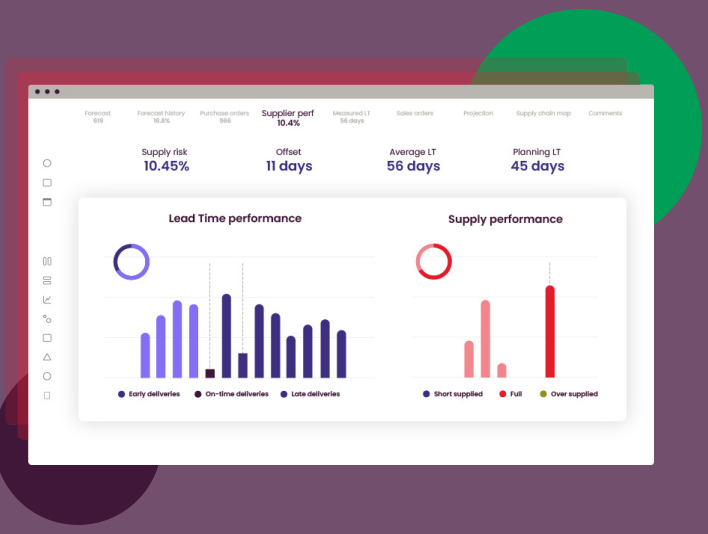
2. **Long-term partnerships:** Seek long-term partnerships with your suppliers. Build trust and loyalty by consistently fulfilling your commitments and treating them as valued partners. This can lead to preferential treatment, better pricing, and increased responsiveness.

3. **Pay on time:** Ensure prompt and fair payment practices with your suppliers. Timely payments demonstrate reliability and financial stability, which can enhance the trust and willingness of suppliers to go the extra mile for your business. Consider implementing automated payment systems to streamline the process and minimize delays.

4. **Share forecasts:** Provide your suppliers with accurate forecasts and production plans to help them anticipate demand and align their resources accordingly. This enables them to optimize their operations, reduce lead times, and improve their overall service level. Regularly update them on any changes in your plans to maintain alignment.

5. **Collaborative problem-solving:** Encourage collaborative problem-solving with your suppliers. When challenges arise, involve them early to leverage their expertise and develop solutions jointly. This approach fosters a sense of shared ownership and strengthens the relationship by demonstrating that you value their input and are committed to finding win-win outcomes.

Netstock measures supplier performance, comparing planned vs. actual lead times, and promptly identifies suppliers not meeting delivery requirements. It creates a risk profile for each supplier and automatically adjusts replenishment based on supply changes.



Step 3: Optimize inventory

Right stock, right time

Inventory optimization is a strategic process of balancing having enough inventory to meet customer demand and minimizing the costs associated with carrying inventory.

The goal: to ensure the right products are available in the right quantities at the right time without tying up too much capital in inventory or incurring unnecessary expenses like storage, handling, and operating costs.

The different types of inventory for manufacturing:

- **Raw materials:** consists of procured materials and components that the production staff needs to create finished products
- **Work-in-Process:** consists of stock items that have already been processed to various degrees and are in the process of becoming finished goods
- **Finished goods:** products that have been through the whole production process and are ready to be sold

Identify the right stock to focus on

It is challenging to view hundreds, or even thousands, of inventory items every day and decide what to buy, what's running short, and what items you have too much of. The best way to focus time and resources is to classify your inventory according to its level of importance. According to the Pareto Principle, classifying each inventory item allows you to focus on the 20% that will give you 80% of your sales.

First up, you need to organize your inventory!

Identifying obsolete items

Identify and remove all of the obsolete items. These items typically have not sold a single unit in 18 months to 2 years. Obsolete items should not be ordered under any circumstances – they are just noise that will distract you from the 20% that make up most of your sales.

Action:

Begin by marking all items with no sales in the last 24 months as obsolete.

Identify non-stocked items

A non-stocked item is one that you keep on the price list but not in the warehouse. You will only order a non-stocked item when a customer orders it. They are typically very slow movers that your customers can't quickly or easily get elsewhere and are willing to wait for.

Action:

Mark all items with no sales in the last 12 months as non-stocked. Ensure not to include new items you haven't stocked for at least 12 months.

Now that you know your stocked items, you can further classify your items according to the ABC analysis

You classify each stock item into the following categories:

- A = highest value, i.e., your best-selling items
- B = medium value, i.e., your mid-range selling items
- C = least value, i.e., your remaining items

Managing inventory is a collaborative process and can only happen in collaboration with the rest of the business. The same thinking applies when classifying your inventory. Planners can't only focus on ABC item value, and they also need to consider the **sales velocity** of each item, such as:

- H = High velocity
- M= Medium velocity
- L= Low velocity

A practical example

A high-value, low-velocity item like a car engine is planned and managed in your inventory system differently from a low-value, high-volume item like nuts and bolts, even if the annual turnover is the same.

Incorporating the sales velocity as part of your **classification matrix** will make your inventory classifications more precise.

In essence, an AH item is a high-value, high-velocity item is critical as it's a high-value fast moving item that makes up the bulk of your sales – you'd want to be extra careful not to run out of stock on these items.

In contrast, a CL item is a low-velocity, slow-moving item.

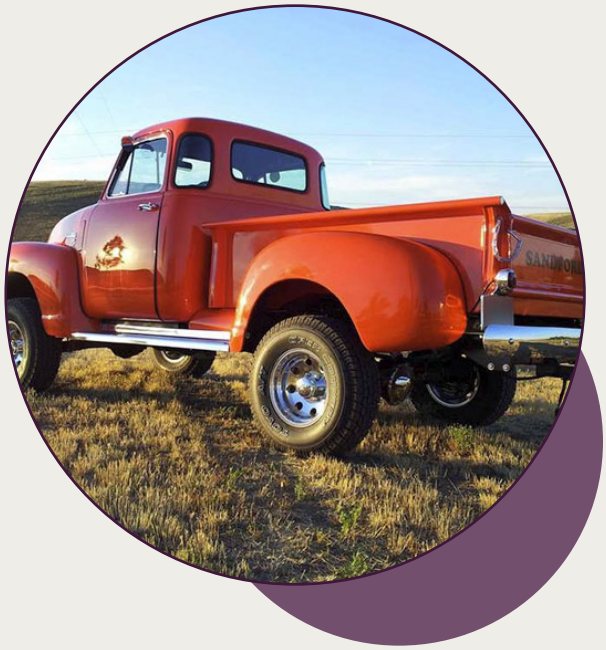
Netstock automatically classifies every item based on sales value and sales velocity, creating an intuitive matrix of product importance. This holistic inventory profile lets you focus on your business's most profitable and highest-demand items.

CUSTOMER STORY | LMC TRUCK

> *Using the Netstock classification matrix for both sales value and velocity, we can quickly determine the revenue impact of a potential stock-out on the horizon. If it's on an AH (high value, high volume) item, we can act before it becomes a problem. Classifications also mean we can focus our attention on our highflyers and no longer waste time on low-value, low-volume items.*
>
> LMC Truck

Read LMC Truck's story

LMC Truck reduced excess stock and decreased potential lost sales.



Have the right stock at the right time...

Set your inventory policy. Setting the inventory policy is a crucial initial step in optimizing your inventory. The policy sets guidelines ensuring every order you place aligns with your goals for balancing your inventory investment and achieving your desired fill rate. These guidelines establish rules for each stock item or SKU, such as the target fill rate, replenishment cycle, safety stock level, lead time, and monthly demand. An inventory policy makes it easier to assess how well your inventory is performing or identify potential risks.

Place optimal orders. Knowing how much to order and when to place the order while keeping your inventory levels balanced is often the most-significant challenge when planning inventory. You can strike the ideal balance between inventory levels and order frequency by calculating the optimal order quantity based on lead time, demand variability, and safety stock levels. This approach can prevent **excess inventory** and related carrying costs and minimize the risk of stock-outs and the potential for lost sales.

Reduce risk with safety stock. Safety stock acts as your insurance policy, safeguarding your business against stocking out of critical items and helping your business prepare for unforeseen changes in supply or demand. **Safety stock** is extra inventory held by a business to mitigate the risk of delays in supplier delivery or unexpected spikes in demand. By incorporating safety stock into your inventory management strategy, you can quickly respond to changing market conditions, minimize the risk of stock-outs, and maintain high levels of customer satisfaction. Safety stock also helps reduce inventory carrying costs by avoiding rush orders or expedited, costly shipments.

Davey Textiles reduced surplus orders by $2,8 million.

CUSTOMER STORY | DAVEY TEXTILES

When we started with Netstock in January 2022, we had $3,8 million in surplus orders. Eleven months later, I reduced that to under $1 million on 19 items. Our customer fill rate was 89.4%; we currently provide a 95% fill rate. We have been delighted, not only with the capabilities of the product but with the Netstock team as a whole.

Davey Textiles

Read Davey Textiles' story

Davey | TEXTILE SOLUTIONS INC.

Step 4: Improve forecasting

Predict and plan

By accurately predicting future demand, businesses can plan more efficiently to reduce stock-outs, and long lead times, enhance product availability and ensure their supply chain planning is customer-centric.

Forecast management is a critical component of healthy inventory

Forecasting is one of the key drivers of inventory replenishment. Dumping data from your ERP into a spreadsheet isn't giving you a forecast, and you certainly can't rely on checking every single record and calculation one by one, day after day. So, you need to plan your forecast correctly.

Challenges...

What makes forecasting challenging?

- Eratic demand
- Seasonality
- Introducing new products
- One-off project sales
- Tens of thousands of products
- Product replacement
- Market cannibalization
- Channel forecasts

The theory

Forecasts are inherently inaccurate, but what truly matters is understanding the level of inaccuracy and recognizing areas requiring adjustments. To ensure consistent and measurable forecasts, a demand planning tool is vital. It generates a baseline forecast, capable of adapting by integrating market knowledge and accounting for exceptions.

The approach

What's the best way to produce the highest quality forecasts?

1. Establish a baseline forecast per stock item.
2. Adjust the forecast to take account of:
    - Seasonality
    - Product growth
    - Product replacement
    - Marketing campaigns

Once you've established these basics, you'll need to review and monitor the calculations you've done:

1. Review forecasts at a macro or summarized level to ensure they are reasonable, adjust at a top level where required, and then blow macro forecast adjustments down to a line item level using a prorating mechanism.
2. Monitor forecast performance using a mechanism that distills the amount of over-and under-forecasting. The direction is essential as a bias towards:
    - Over-forecasting will lead to excess stock and a bias towards
    - Under-forecasting will lead to stock-outs

Now that you've assessed the quality of your forecasts, you should establish a process to manage and adjust them continually:

1. Have a mechanism for highlighting, both weekly and monthly, the forecast that is tracking sales poorly. Always rank the items in these exception reports by the value of what will have the most significant impact on generating excess or leading to stock-outs.
2. Have a structured weekly and monthly review to ensure ongoing improvement.

Learn more about Netstock's Pivot Forecasting engine.

Generate forecasts that factor in trends, seasonality, promotions, and events with Netstock.

Collaborate across departments and adjust forecasts to drive continual improvement.

Watch here

CUSTOMER STORY | Aero Health

Aero Health reduces stock-outs and lost sales.

"Netstock allows you to forecast in different ways based on sales parameters. It won't just give one forecast across the entire product range as some other systems do."

Aero Health

Read Aero Health's story

Step 5: Optimize capacity

Meet proudction demand

Capacity planning ensures that resources are used optimally to meet production demands.

Manufacturers can determine the appropriate production capacity required to balance supply and demand by analyzing historical data, market trends, and growth projections. Effective capacity planning minimizes the risk of:

- Overproduction
- Reduces excess inventory costs
- Prevents underproduction and missed opportunities

Capacity planning is an ongoing process that requires monitoring, adaptation, and improvement to ensure manufacturing operations are efficient and responsive to market changes.

Here's how capacity planning helps demand planning:

A scenario to consider:

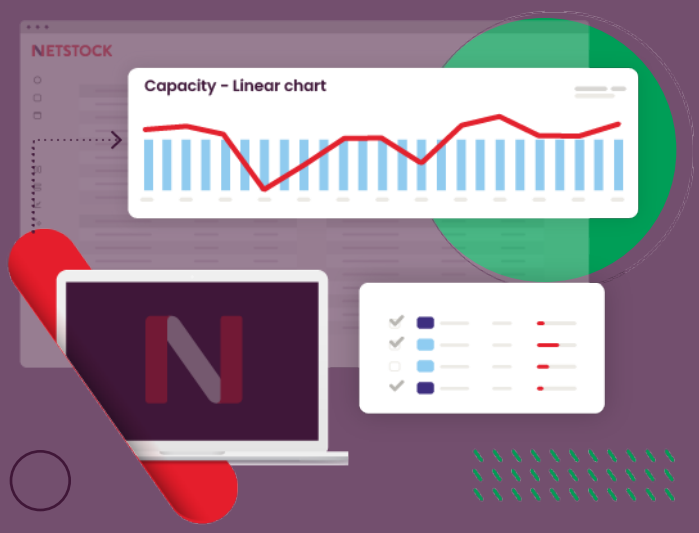
Suppose a company manufactures smartphones and has noticed that their sales tend to spike during holiday seasons, like Black Friday and Christmas. Demand planning involves forecasting the expected number of smartphones customers buy during these peak periods. However, without proper capacity planning, the company might face issues. If they solely focus on demand planning and predict high sales without considering their manufacturing capacity, they could end up needing more resources, such as labor, machinery, and raw materials, to meet the increased demand.

Here's how capacity planning can help in this scenario:

- **Capacity assessment:** The business should analyze its production capabilities and available resources, including the number of assembly lines, skilled workers, and suppliers' capacity. This assessment provides insights into the maximum number of smartphones they can produce within a given time frame.
- **Resource allocation:** Based on the capacity assessment, the business can allocate its resources effectively. For instance, they might need to hire temporary workers, arrange for additional machinery, and secure sufficient quantities of raw materials before the expected peak demand periods.
- **Production scheduling:** With capacity planning in mind, the business adjusts its production schedule to accommodate the higher demand periods. This might involve running longer shifts, increasing the number of production runs, or even outsourcing some production steps to third-party manufacturers.
- **Buffer capacity:** Capacity planning also takes into account buffer capacity to handle unexpected fluctuations in demand or supply disruptions. This buffer helps the business handle variations without compromising its ability to fulfill customer orders.
- **Collaboration with demand planning:** Capacity planning informs the demand planning team about the realistic production capabilities during peak demand periods. This collaboration ensures that the demand forecasts align with the company's manufacturing capacity.

By integrating capacity planning, businesses can better manage their resources, reduce the risk of shortages or overages, and ultimately enhance their ability to meet customer demand during high-demand seasons. This holistic approach reduces production bottlenecks and delivers a smoother customer experience.

With Netstock, Finite Capacity Planning recommends strategic inventories when appropriate and automatically spreads material requirements across resources or vendors to optimize cost and throughput, preparing your business for seasonal peaks, planned outages, or rapid growth.



3. How Netstock accelerates inventory planning for manufacturers

Embrace technology: the power of automation and AI

In a recent Netstock survey, from direct interviews with supply chain executives of small to mid-sized wholesale, retail, and manufacturing companies uncovered:

92% stated that over the last three years, supply chain disruptions have caused a significant increase in the amount of inventory that needs to be kept on hand.

80% stated that the cost of warehousing inventory significantly increased over the last two years.

22% are using commercial inventory management software...

BUT the remaining **78%** are likely facing serious supply chain pains simply because **they do not have the right solution**.

Can you afford to make the same mistake?

Check out how Netstock's AI-Powered Opportunity Engine automatically tells you when you have items out of stock and recommends the right actions!

Watch video

Netstock optimizes the flow of materials so you can meet demand

- **Bill of Material (BOM) visibility:** use visual linkages and ratio information to inform procurement, production scheduling, resource allocation, and inventory management decisions.
- **Monitor and measure supplier performance:** work with reliable suppliers, improve lead times, and automatically adjust safety stock.
- **Optimize ordering:** use replenishment cycle and order size constraints (MOQ, OM). Quickly raise an order filtered to a specific work center or product range.
- **Manage materials with predictive analytics:** balance supply across multiple production lines.
- **Assign demand forecasting models:** for each item, customer, region, unit, price, cost, or margin.
- **Supersessions:** use existing raw materials before ordering another version.

Save time, money and resources with Netstock

Contact an inventory expert to discuss how Netstock can optimize your inventory.

Get Started

Place orders quicker

Save time on planning, forecasting and ordering

Minimize stock-outs

Save time on planning, forecasting and ordering

Reduce excess stock

Release cash tied up in excess inventory

Enhance functional collaboration

Align sales, operations and finance with S&OP

About Netstock

Netstock is a leader in predictive supply chain planning software and trusted by more than 2,200 customers globally to place optimal orders, reduce stock-outs, and minimize excess stock. Netstock's AI-powered cloud-based solution synchronizes demand and supply insights with ERP platforms, providing small to medium-sized businesses with supply chain visibility to unlock cash, respond to change, and offer exceptional customer service, delivering ROI from day one. For more information, visit **www.netstock.com**