

## **Demand Planning, Inventory Levels, and Shortening Cycles: The New Norm Moving Forward**

By Jim Holbrook

Founder - Premier Plastics

Uncertainty was beyond question a certainty the last 18 to 24 months in a global market besieged by the onslaught of COVID-19, which is still hugging the corners of society. However, there were several other mitigating factors that made 2021-2022 a very difficult year for manufacturers, retailers, distribution centers and family households alike. Especially hard hit in 2021 and early 2022 were the shipping and manufacturing industries, which are still hobbling along yet showing improvement daily.

If anything, what the last 18 to 24 months exposed is that there are many weak points in multiple companies that quite frankly were just not prepared. The lack of insight and preparation of the environment proved difficult for those that were unable to take advantage in such a competitive industry. Although we are seeing some easing of material shortages, it is likely that this volatility will remain in place for the foreseeable future. However, improved foresight into the fluctuations of such a hostile environment and better planning strategies will allow companies the confidence to move forward.

Due to increased freight and shipping times for product delivery, we were forced to look very intimately at our ordering cycle for raw materials. Throughout this process we identified key indicators: Demand planning, inventory levels/cost savings, shortening cycles, and review management.

I want to focus on demand planning, inventory levels, and shortening cycles.

Demand Planning - has likely been the biggest improvement in allowing us tighter controls over inventory levels, while at the same time keeping enough new raw materials in place to eliminate downtime in our production or our quality thruput.

Having foresight into the future needs of a company requires much more than software. It requires relationships with your customers, your vendors, and your team members. We have found that utilizing that foresight creates the ability to be more efficient in our planning and manufacturing processes, which in turn has reduced our costs, thereby keeping those costs from flowing downstream.

Inventory Levels - In the past, production planning had been left to incoming customer orders or the uncertainty of available product. Inadequate planning leads to inadequate forecasting, resulting in a lack of inventory, a lack of operational management, and a lack of labor. This could also be called a push inventory stream, meaning you ordered the materials based on forecasts

and/or worry of extended lead times without planning. Either way, extended lead times create uncertainty.

A key factor in reducing supply chain constraints is understanding our production levels vs. raw materials available. This understanding provides greater insight into production-to-delivery deadline constraints. We have been very successful at maintaining our on-time delivery goals over the last 18 to 24 months consistently. However, we are seeing some slight tightening as demand from existing clients has increased.

Shortening Cycles – It is generally recognized that a cycle time is a measurement of most of what we do, or to be clear, a span of time to complete a function. In manufacturing we use this as a measurement of production. By shortening the cycle of purchasing raw materials and having additional stock in place, we have been able to order raw materials at much lower volumes with shorter ordering cycles. This process gives us the ability to keep inventory levels in line while not succumbing to extreme overbuy situations due to panic. This approach has led to significant cost savings and has generated an improved level of cash flow that would ordinarily be absorbed in inventory.

For manufacturers, it's the level of manufacturing output vs. production planning. The objective for both is to best satisfy the current planned level of sales (sales plan/forecasts), all while meeting the general business objectives of profitability, productivity, competitiveness, and service. One of the ways that you allow for additional production time is to increase hours or increase capacity. In 2022 we added our 5<sup>th</sup> production line, seriously contributing to our competitiveness and ability to deliver for our clients while building market share through increased production levels, consistent on hand material, and a team committed to these principles.

To summarize, we were fortunate enough to have had such a great group of minds that pulled together when needed and developed a winning formula that kept us competitive, relevant, increased our market share and maintained our presence in an ever-changing environment.

American manufacturing is the bedrock of a prosperous people. By meshing the latest technical advances with a well-informed team of contributors, we weathered the storm and are seeing the rays of hope on the horizon.