Continuous Improvement

4 Ways SyncKanban eKanban Software Supports Continuous Improvement

Terms to Know

K-Loop® – The closed loop of activity in the use and supply of materials. Your eKanban replenishment signals follow this loop as materials are consumed and replenished.

K-Loop® Size – The number of eKanban in your K-Loop.

Every year, right-sizing inventory tops the list of strategic goals for many manufacturers. But right-sizing inventory is never a "once and done" initiative. Even in demand-driven manufacturing environments where replenishment is linked to demand, there is room for continuous improvement. In this paper, we're going to focus on how you can use several features within SyncKanban™ eKanban Software from Synchrono® to continuously improve inventory management in your organization.

Continuous improvement using SyncKanban software focuses on four main features: K-Loop® sizing, inventory buffer management, supplier performance management and real-time synchronization to demand and supply.

synchrono®
manufacturing software

1. K-Loop® Sizing.

The size of your K-Loop refers to quantity per eKanban and the number of eKanban in the K-Loop®. K-Loop size is a determining factor of how much inventory you have on hand, so getting this right is essential. Too many signals and you'll have too much inventory. Too few signals and you run the risk of shortages and stock outs. We provide a sizing utility in SyncKanban™ software that allows you to set several parameters, such as service levels, replenishment method (statistical v. "days of demand") and your K-Loop horizon. Then, the system does the calculations for you.

SyncKanban® is one of the few eKanban systems on the market that automatically resizes the number of Kanban in the K-Loop® based on current order demand, supply status and the realities of the shop floor.
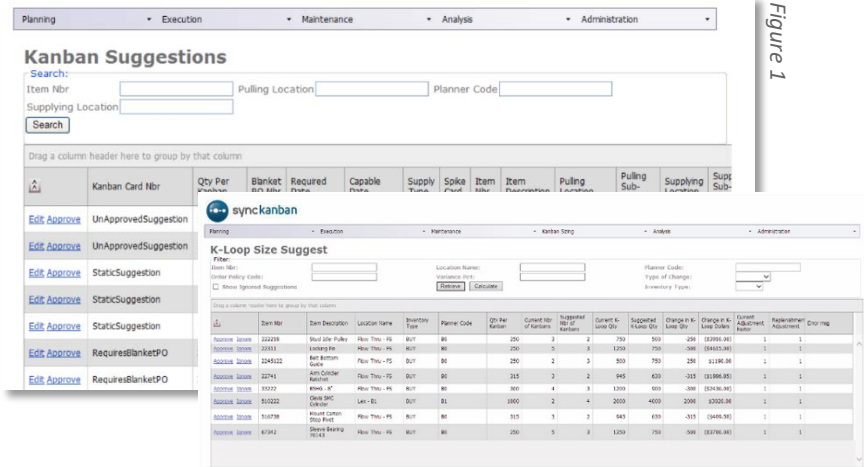

Figure 1

2. Real-time Synchronization to Supply and Demand.

Since demand and supplier performance changes over time, you want a system that is constantly working to ensure the K-Loop is always right-sized. SyncKanban® is one of the few eKanban systems on the market that automatically resizes the number of Kanban in the K-Loop based on current order demand, supply status and the realities of the shop floor. When demand increases or decreases, the rate of Kanban signals increases or decreases automatically, keeping supply synchronized to demand. If this change is temporary, the rate of Kanban signals takes care of the synchronization, but if the change in demand is longer-term, the system will suggest a change to the K-Loop sizing.
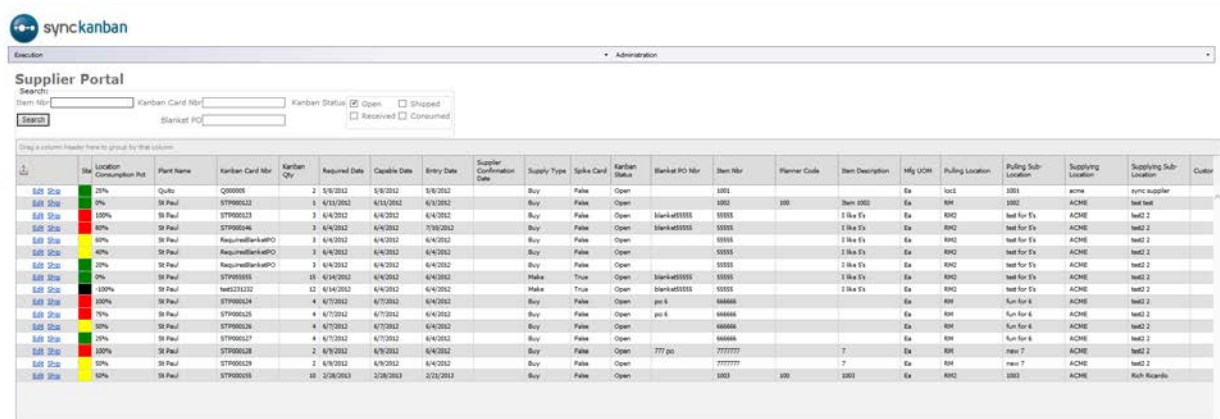
3. Inventory Buffer Management.

You've set up your K-Loop® size for each of your items, but how do you know you've got it right? That's where inventory buffer management comes in. In SyncKanban, the *K-Loop Performance Report*, also known as the *Stock Buffer Trend Report*, gives you a historical look at the health of your K-Loops.

A K-Loop that is performing well spends the majority of the time in the yellow zone. K-Loops that spend most of their time in the green or blue zone have too much inventory. K-Loops that frequently drop into the red zone have too little inventory. The example below (fig. 2) shows a K-Loop® that contains too much inventory. Adjusting your sizing parameters can help you keep inventory levels "in the zone."

STOCK BUFFER TREND REPORT

Figure 2
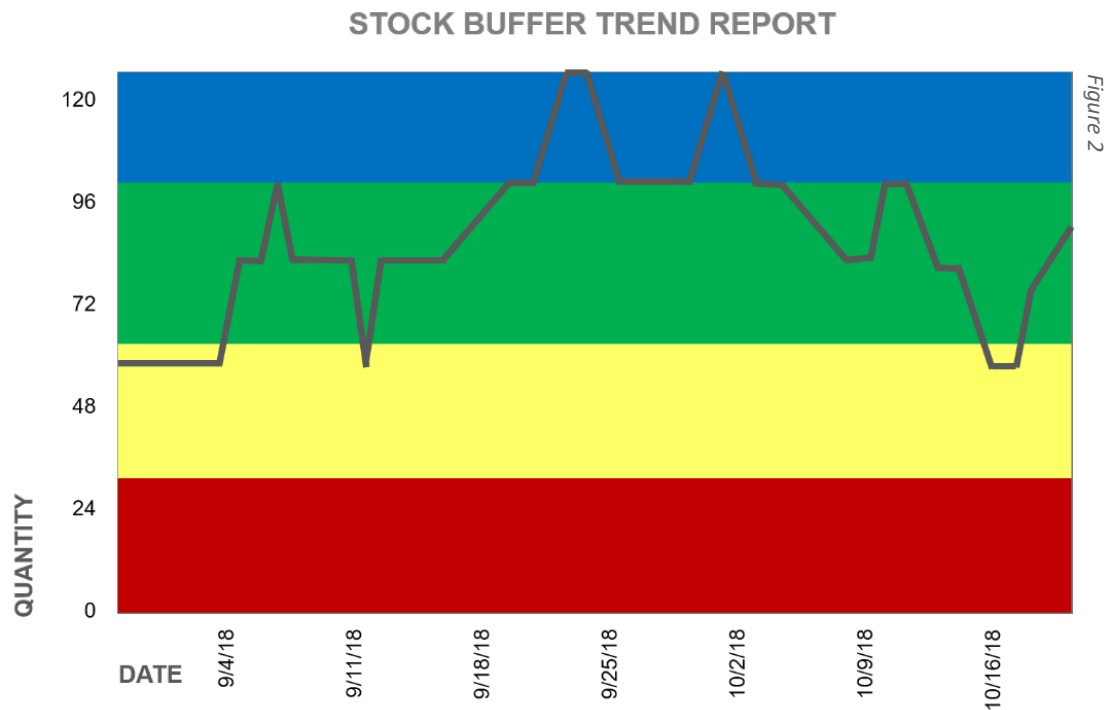
4. Supplier Performance Management.

K-Loop® sizing isn't the only reason buffer inventory can spend too much time in the red zone. Poor supplier performance is another. In SyncKanban™ software, the *Source Performance Report* allows you to drill into the historical performance of your sources of supply, whether they be an internal source, such as a work cell, or an external supplier.

If the problem stems from an external source of supply, procurement professionals can work to strengthen those relationships or replace them. Sometimes, just improving communications with suppliers can be enough to fix performance issues. SyncKanban includes a type of Kanban called a Supplier Kanban that can be used to signal replenishment from external sources. This allows procurement to focus on higher value-add activities such as negotiating blanket purchase orders while leaving the day-to-day replenishment actions up to SyncKanban™. The SyncKanban Supplier Portal (fig. 3) provides real-time visibility into the performance of their K-Loops, so suppliers know how to prioritize order fulfillment.

SyncKanban also provides similar guidance to internal work cells through the Work Cell Priority Screen which shows Kanban by work cell.

Dynisco Takes a Giant Leap Forward on Their Continuous Improvement Journey

Dynisco, a materials testing and extrusion-control instrumentation manufacturer, had gone about as far as they could go in their continuous improvement program with their current technologies. Their efforts to enhance productivity had increased flow velocity in their facilities, but replenishment couldn't keep pace. A manual pull-based replenishment program was a step in the right direction, but it still wasn't enough. To top it off, Dynisco wanted to reduce inventory levels by another 30%.

By replacing their manual Kanban processes with Synchrono SyncKanban software, Dynisco was able to scale pull-based replenishment to include the nearly 800 SKUs built across facilities and geographies and streamline the process from 66 steps to 6. Within twelve months of implementation, inventory reductions averaged 40% across all facilities – 10% more than had been targeted – resulting in a savings of almost $1 million.

READ THE FULL STORY

Try SyncKanban for Yourself

We have several ways you can take a closer look at SyncKanban™ eKanban software. If you're just starting your journey toward pull-based manufacturing, check out our resources page, where we have posted a variety of educational white papers and case studies. We also have both live webinars as well as on-demand demonstrations available. Or, if you're ready to try it out for yourself, you can request a free trial version. And as always, we're here to answer any questions you have. Just reach out to us on our website, and one of our Demand-Driven Manufacturing specialists will be glad to help.

SyncKanban software from Synchrono keeps instantaneous supply chain signals moving throughout operations and the extended supply chain at lightning speed. This automated, pull-based inventory replenishment system sends signals to suppliers to deliver materials, helping reduce the costs and waste associated with excess inventory and replenishment process administration. For many, that means up to a 50% reduction in inventories, on-time production, improved cash flow and a distinct competitive advantage. Free trial available at www.synchrono.com.

Synchrono is a leading provider of demand-driven manufacturing systems that improve flow, manage constraints and drive on-time delivery. The company's manufacturing operations, supply chain and ekanban solutions are based on Lean and constraints management methodologies and integrate with existing ERP systems. Sync with us at www.synchrono.com.