



# Introduction

As a 60-year market leader in the wholesale distribution of fluid transmission systems, chances are good that Harrington has what you need, where you need it. Its network spans from Hawaii to Florida and its catalog includes roughly 550,000 item/ warehouse combinations. Its primary customer base includes OEMs and contractors, and it serves a broad range of industries, from semiconductor manufacturing to water treatment, from pharmaceuticals to swimming pools. Whether you're sourcing pipe valves and fittings, pumps, tanks and filters, or any other corrosion-resistant product, you'll find it in one of the 57 nationwide branch locations.

# Industry

Wholesale Distribution

#### **Solution**

- Demand Forecasting & Planning
- Inventory Optimization

### **Results**

- Easy integration of brand new distribution center
- Better understanding of demand
- · Increased visibility across teams

# **Challenges**

Like many companies, Harrington needed a way to balance its inventory investment with service targets. Planners tended to keep inventory lean but needed to find stock levels that wouldn't jeopardize service.



So what was stopping them?

To start with, Harrington's planning system involved a lot of guesswork and inefficient forecasting methods. As Director of Strategic Supply Chain, David Burnett, explains, "Our historical challenges were similar to a lot of companies in our industry. We were using a flat average and fairly manual math to do a lot of our forecasting. Or in the absence of data analysis, we just relied on somebody who knew their market and could give us an estimated min/max for each product or product line. This is something that people were comfortable with because it had been done for a long time, but the reality was it just wasn't a tremendously accurate or data-driven approach."

Not only was the system inaccurate, it was also a headache to manage. "We were manually reviewing every item/warehouse combination and we didn't have the resources to do it as often as we needed," says Scott Gudat, Sr. Inventory Logistics Manager, who, with the better part of 35 years at Harrington, knows the business from top to bottom. "At that time, we probably had eight or nine different locations to one operations manager. A manual review of all those items might take him a month to do. In between the rest of his workload, he was touching each location maybe once a year."

This manually intensive planning method left Harrington with disparate, independent branches rather than a unified business. Burnett, who was brought in to help integrate inventory management across the network, explains, "Certainly we want all of our branches to service and be completely responsive to their markets, but we also want to make the best use of our inventory and infrastructure so we can keep providing high levels of service without adding a lot of extra costs to our operational base."

## **Solution**

So how did Harrington lighten the workload, eliminate guesswork and create a more cohesive network? By implementing ToolsGroup's Service Optimizer 99+ (SO99+). This automated solution allows Harrington to better understand its demand and keep its inventory lean without undercutting service. "SO99+ gave us the ability to use functions like calculated ranking and corresponding service levels to target our safety stock investment; it also allowed us to do some detailed simulation to optimize our product replenishment paths in several key places in our network," says Burnett. "It was a lot more difficult to do with the manual process and flat average that we were using before."

After an eight-month implementation, Harrington's branches gained more and more confidence in the system. As Gudat explains, "We had a loose network of individual branch stores, each one with a manager that did their own thing. So when we came in from the corporate standpoint and started to give them a more sophisticated view of what they should have in their inventory, we



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would show them what the numbers would be and they would see that they weren't going to run out of stock."

Another integral player in the implementation and daily management of SO99+ is Matthew Fuller, Harrington's Inventory Planner and self-proclaimed "primary button-pusher." But don't let him fool you. Fuller has 10 years of experience at Harrington and handles most of the system's daily workflow. He appreciates how easy it is to review the data and fine-tune the forecast. "I think it's a very intuitive system," Fuller says. "It works well and I really enjoy the fact that you're able to review and process the data

without a lot of extra back and forth. We're able to look at different scenarios, service classes and lead times to figure out if we need to raise or lower the service level. The demand planning helps me confidently forecast even items with unpredictable demand."

With automation handling the grunt work, Harrington can manage by exception, with the ability to review their service level settings and pinpoint where they can get more aggressive with their service targets. It also keeps the workflow gears greased by making it easy to share findings. "As a whole, the system works perfectly," says Fuller. "Analyzing the data and going through my normal day-to-day workflow, I'm able to share information with other stakeholders who aren't as familiar with the process. It makes more sense to them when they can see, in a graph or reporting form, what the actual usage on some of our items looks like."

### **Results**

One of the biggest benefits Harrington reaped came when the company opened a brand new distribution center in the Midwest. "We were able to use SO99+ to simulate the impact of pointing all the replenishment paths from an existing set of branches to a location that did not yet exist in our production system," says Burnett. "It saved us having to try to manually add up all of those branch demands and make sure we weren't duplicating any dependent demand in the roll-ups. That was a certainly big win for us and one we will certainly use again in the future as we look at the best places to do things like consolidated purchasing and regional inventory management." This successful network simulation will help guide Harrington's future implementation of a hub and spoke network. "We'll be looking at how we can better utilize some of the existing network infrastructure to consolidate purchasing and inventory management and squeeze even more efficiency out of the system."



Harrington now has increased visibility and a better understanding of demand across teams and looks to continue honing its supply chain management. According to Fuller, "It's just a matter of continuously fine-tuning some of the parameters and making sure that we're able to show accurate data to the people that need to make a decision based off of it."

Harrington isn't going to stop there. The next step is a dive into a granular look at their forecast accuracy. According to Burnett, "We're using a good data-driven approach with forecast accuracy and service levels to fine-tune where to spend the most time from a forecast perspective and really quantify the value that the system is adding to the organization."

## + About ToolsGroup