

Assembly Fasteners, Inc. (AFI)

How “Smart Bins” are Improving Industrial Supply Chains

Walk into any of the most high-tech manufacturing facilities, distribution centers or warehouses, and you’re likely to find a bin arrangement that feels out of place and dated. Bins, arranged in rows that are stacked on top of each other, hold all the vital parts and supplies that keep business moving – fasteners, tools, tape, wiring, personal protective equipment and anything else that can be imagined.

But even as the supply chains for other parts of these operations have become more modern and advanced, bins are often stuck in the past. Many bin arrangements offer no visibility into the flow of materials at any given moment, which leads to a cascading series of impacts that hurts the bottom line.

Employees who know that the bin system doesn’t work well end up taking more than what they need so they can do their jobs without interruption.

This results in chronic stock-outs for other employees, interfering with the overall productivity of the facility.

Distributors make two visits to complete a single task – one visit to count what’s in each bin, and another, several days later, to act on that information and restock.

“We could tell from the get-go that this would be a game-changer for us.”

Hugh Watson, AFI president

Management deals with the stock-outs either by placing costly emergency orders, or sending employees on “milk runs” for supplies down the street. Many managers choose to overspend on inventory to keep a backup supply of emergency stock on hand in the building.

On all of these levels and more, the old bin arrangement is failing today’s business world. Bins represent an old, manual process, while the rest of the world is moving to real-time supply chain visibility and just-in-time delivery.

One Company’s Approach

Assembly Fasteners, Inc. (AFI), a global distributor of products and services to very large industrial customers, was working through many of these problems with old bin systems. AFI specializes in vendor-managed inventory (VMI) programs in which it manages its customers’ project inventory levels.

For AFI and its customers, the old method of restocking bins was time-consuming.



ACTYLUS™ keeps bins full by sending automated reorder alerts straight to AFI.

For example, on one account that has 200 part numbers, AFI would send a technician to the job site to manually check every single bin in the array with a scanner to determine what to order for restocking. Techs would then upload the information to their internal systems to produce an order. They would have to make a return visit to restock the bins.

Sometimes, in order to avoid stock-outs and rush fill orders, techs would refill the bins above the maximum level, which represented an added inventory cost.

Seeking a new way of doing things, AFI began looking at automated bin systems, but ruled most of them out for being cumbersome or too difficult to use.

However, immediately upon seeing Apex ACTYLUS™ Smart Bins, AFI president Hugh Watson grew excited.

“We could tell from the get-go that this would be a game-changer for us,” Watson said.

ACTYLUS™ Smart Bin System

AFI deployed ACTYLUS Smart Bins with two contract manufacturing customers that each have facilities of more than 100,000 square feet. ACTYLUS automatically sends current inventory levels for each bin to the Apex Trajectory Cloud™ platform, which then alerts AFI and its customers when those levels drop to pre-set minimums. Trajectory reports are viewable on smart phones, tablets and computers.

This real-time visibility into inventory levels eliminates the need for counting trips, safety stock and emergency restocking. Every bin always has enough.

Kent Savage, the founder and CEO of Apex Supply Chain Technologies®, has launched a number of automatic dispensing solutions such as ACTYLUS in recent years.

“The trend in business and industry now is to modernize every stop in the supply chain and drive as much waste as

possible out of the system,” Savage said. “Because of that, smart bins have incredible promise. By eliminating all of the manual effort that was needed to keep the old bin systems working, employers can keep their labor force focused on more important work, generating higher productivity and greater profitability.”

Multiple configurations in the number of rows and size of the bins are available, so ACTYLUS™ can be customized for any setting. The clean, LED-lit bins create a solid first impression.

Immediate Savings

After AFI installed the ACTYLUS system, it realized an immediate savings in both time and inventory costs.

“We don’t lose time scanning bins anymore,” Watson said. “Now we get alerts by email, place our orders for replacement parts and make one trip to replenish the bins.”

Technicians who used to spend so much time on manual counts immediately regained a full day each week because ACTYLUS checks each bin for them. Projected over an entire year, they’re saving more than two months of time that can now be spent on more productive tasks.

“Once the companies that are using old bins sit down and start doing the math, they start to realize just how much labor savings are possible by moving to smart bin technology,” Savage said.



ACTYLUS™ features brightly lit bins to ensure quick and easy item selection.

Eliminating Safety Stock

With Trajectory automatically notifying AFI to reorder when inventory levels reach pre-set minimums, there’s no concern about stock-outs, so safety stock is no longer necessary. AFI pulled back on the levels of inventory that it placed in the bins on consignment – returning \$11,000 of inventory in one location and \$4,000 in another.

“After we installed ACTYLUS it was like money was falling from the sky, because we were able to pull back an incredible amount of inventory,” Watson said.

A quality control manager even wrote up the ACTYLUS system for ISO continuous quality improvement at one site.

When Stockouts Cost the Distributor, Too

In some environments, stock-outs that are caused by inefficient inventory management can be more than a headache – they can lead to contractual penalties for distributors that reach hundreds of thousands of dollars.

This can happen in complex industries with overhead and labor costs that are extremely high, such as pharmaceutical and aerospace manufacturing. Distributors in these industries may be subject to major fines if stock-outs slow production. Beyond the fines, the contracts themselves may be put into peril.

With that level of liability on the line, an extra layer of pressure falls to distributors to keep their dated bin systems working, or to find more reliable technology instead.

“At the same time, you’re providing a solution that really has strong visual appeal,” Watson said. “It replaces dirty, mismatched old steel shelves with a clean, well-lit system. When people see it they talk about how they want to move more of our products into the ACTYLUS Smart Bins, which helps us to expand our partnership with those customers.”

Immediate Growth

One site had a rack of masking products adjacent to its new ACTYLUS bins, and immediately gave that business to AFI so it could expand its use of ACTYLUS.

“They began asking how soon they could get more ACTYLUS racks installed, so it’s quickly increasing the amount of inventory we’re providing to that customer,” Watson said.

In other situations, customers who see that they aren’t using every available bin in their ACTYLUS system are ordering new SKUs from AFI so they can fill every bin.

Brand Differentiator

Watson says the ACTYLUS solution has become a major advantage for AFI.

“We work in a competitive industry, so the Apex ACTYLUS system gives us a different look and appeal. People stop to look at this when it’s installed. It helps us to separate ourselves from competitors that are often right next to us on the shop floor.”

Discover the Distributor Differentiator

To learn more about the ACTYLUS Smart Bin System from Apex Supply Chain Technologies®, visit ApexSupplyChain.com/Actylus, email us at info@apexsupplychain.com or call 1.800.229.7912.