



Inventory management

How Improving Inventory Management Buys Machine Shop Productivity—and Profit

Kip Hanson | Apr 08, 2025

Unless they bring doughnuts, no one likes letting strangers into their machine shop. Nor do most companies wish to place controls on the everyday consumable items needed to keep the machines running and the assembly lines operational.

But if your tooling and supply inventory sees regular stockouts, suffers from a lack of visibility, or is even more out of control than a rental full of college kids on spring break, there are some very good reasons to do so.

In many manufacturing companies, no one realizes there's a problem. Sure, the production floor ran out of gloves last week, and one of the CNC machines sat idle for an afternoon and part of the next day waiting for the UPS truck to deliver a pack of inserts, but that's the cost of doing business, right?

"You can't afford to shut down an operation that makes \$10,000 parts because you've run out of a \$50 tool."

William Bomm
MSC

Leveraging ERP Software

It doesn't have to be. Why not put these items in the company's enterprise resource planning (ERP) software? Most have cycle-counting functionality and will support however many item numbers you wish to keep track of—if only someone takes the time to set them up in the system, print barcode labels and get counting.

Nonetheless, inventory management in most ERP implementations typically revolves around finished goods and the raw materials used to make them. Most companies don't bother **keeping track of the tool crib**, the maintenance room, or the bottom drawer of the shop supervisor's desk, where all the

special cutters and polycrystalline diamond inserts are stashed.

That's not to say it can't be done, only that it takes discipline and time, both of which are often in short supply—something that's especially true when there's a hot job and it's "all hands on deck" getting parts out the door.

Further, maintaining an accurate inventory in any of these places depends on one of two things: a clerk to check items in and out, or the honor system—and you know how well that worked with the breakroom snack box.

Keeping the Assembly Line Running

As for the first requirement—having a qualified employee available to manage the tool crib and supply rooms—it's only getting harder. Assuming the company can find one despite a widening labor shortage, what happens when that person calls in sick or goes on vacation? And what about staffing the second and third shifts?

The sad fact is that it only takes one low-cost item to shut down a very expensive machine tool or even an entire assembly line. Not only can doing so be quite costly, such production delays risk disappointing customers, which potentially damages long-term relationships and leads to additional expenses.

Given the stakes, then, it makes good financial sense to get a handle on the inventory that is all too often overlooked: the tooling and supplies that keep production running at peak efficiency.

Systems such as MSC Industrial Supply's **ControlPoint** offer multiple options. For starters, vending machines for routinely used supplies and commodity items like earplugs and safety glasses are enjoying increased popularity.

To learn more about ControlPoint's capabilities or request a demo, visit [MSCDirect.com](https://www.mscdirect.com).

Smart cabinets are also available for the tool crib and shop floor, which precisely dispense drills, inserts, end mills and other cutting tools, together with the hardware needed to keep toolholders operational.

Hardware Havens

Smart cabinets are equipped with interfaces that automatically track the who, what, why and when of every dispensed item. Operators can swipe a badge and enter a department code or scan a production traveler and have the system apply the cost of whatever they took to the job they're working on. It's easier than ordering a sandwich on Uber Eats.

Such hardware solutions are backed by equally smart software. Users can open a smartphone app or web interface to check on tooling locations and availability; if authorized, they can order production materials, inquire about available stock, view purchase orders and much more, all by scanning a barcode.

All of this not only provides transactional visibility and accountability but also eliminates the stockout situation described earlier. It helps make estimating job and project costs far more accurate.

Instead of using a flat, across-the-board percentage for cutting tools and consumables when calculating estimates, for example, management can finally obtain granular insight into the actual usage of the

items. It's customer-managed inventory (CMI) at its best.

Similarly, the software behind these systems can send an alert when predetermined minimum levels of supplies have been reached. Those responsible can then place a purchase order or, if enabled, the system itself can automatically reorder supplies based on previously determined minimums. It also tracks usage data, ***seasonal trends***, consumption velocity and other key metrics.

Unused and obsolete inventory become a thing of the past, while the tool crib bloat that can occur when using material-specific cutting tools is eliminated.

Just as importantly, management gains the key metrics needed for more accurate forecasting. The purchasing department is better armed to negotiate pricing and determine proper stocking levels, while the shop floor is secure in the knowledge that machines will never sit idle due to a missing drill, end mill or insert. It's a win-win for all involved.

An (Electronic) Helping Hand

Of course, someone must keep the vending machines stocked and the cabinets filled. ***Vendor-managed inventory*** eliminates this burden. By partnering with a VMI supplier, manufacturers can focus on what they do best—making products—and let someone else do the restocking, ordering more materials and performing the cycle counts as necessary.

MSC's ControlPoint, a customizable inventory management solution built to increase productivity and deliver substantial savings, offers all of the above functions.

Data showing granular details, such as how many inserts are used on one shift compared with another—or to machine a particular part—can make a big difference, explains MSC's William Bomm.

"We make it really easy to gather that data," he says. "Our software is very intuitive."

While other suppliers also offer inventory management solutions, MSC's platform is one of the most comprehensive, with a catalog that spans everything from cutting tools and safety equipment to machine tools, abrasives and hardware.

Ultimately, ensuring that you have the tools and supplies you need when you need them helps maximize productivity, which is more important than ever as machine shops and manufacturers grapple with sticky inflation, supply chain disruptions and tariffs that drive up the costs of raw materials.

"You can't afford to shut down an operation that makes \$10,000 parts because you've run out of a \$50 tool," Bomm says. "If your tool crib says you have three, you should have three. We make it very easy and very intuitive to collect that information because it's important."

How can digital inventory management improve operations at your machine shop? Tell us in the comments below.