

Cycle Counting - Step by step

Cycle counting is the preferred method of validating the inventory process. This allows small sections of the inventory to be counted daily or weekly by personnel that know and understand the parts. The real benefit of cycle counting is not the update of the physical inventory records but rather the identification and resolution of the root causes of inventory record inaccuracy. There is less time between the cause for errors and the detection of the errors. Try to remember what you had for dinner last night. That can be hard enough. Attempting to remember why a transaction was done eight months ago is virtually impossible. The investment for cycle counting is significantly less than the annual physical inventory. Because a little is done each day, the risk for large inventory losses is greatly reduced. Just eliminating this financial and management shock of the annual write off can be savings sufficient to support a cycle counting program. The people counting the parts are familiar with the parts and their required handling. Since cycle counting is part of their everyday duty, the learning curve effect is seen and they become very efficient and quick at performing these counts. More counts can be accurately completed at a lower cost than the annual physical inventory. The requirements for an effective cycle counting program are unique part numbers, experienced counters, a control group, a system for tracking perpetual inventory and a small amount of time each day for counting.

Many different approaches are used to accomplish cycle counting. The most successful is to follow these steps:

Count the control group repeatedly. The next step is one that many companies attempt to pass over but is the most critical for long term success. The control group items should be counted daily until 100% inventory accuracy is achieved. Any error in the counts is documented and the underlying systems and inventory control processes improved. The process of recounting a control group gives a small group intensive attention and identifies issues that are most likely problems for the balance of the parts. By identifying and fixing problems for this group, the balance of the inventory should be similarly affected in a positive way.

Identify process issues. Process issues are any event or cause that resulted in less than 100% inventory accuracy. Common errors are failure to make timely transactions, transposing a number, or undocumented usage of a part. These process issues are easiest to see during the control group counting because the time difference between error cause and effect is very short. However, sometimes additional process issues are identified after the cycle counting has expanded to the balance of the database.

Correct process issues. For any process issue identified resulting in inventory inaccuracy, the root cause is determined and resolved. This may mean updating the inventory control process, training storekeeping and production personnel in the correct procedure, or insisting on discipline in the inventory control process. Just as a bank will not allow anyone to come in and take what they want without a transaction, manufacturing inventory must be accounted for in a reliable fashion. With the advent of ATM machines no longer is the teller required to document the transaction at the bank, similarly a storekeeper is not required to document inventory movement, discipline of transactions is required.

Expand to other part numbers: After the inventory control process has been proven reliable with the control group and the inventory accuracy for this group has remained at 100% for a period of time, it is time to expand the cycle count process to the balance of the parts. The increase in inventory accuracy will take an initial jump and then gradually move up from there. It is to be hoped that the goal of the company is to have 100% inventory accuracy as the end goal.

The recommended way to expand cycle counts to the rest of the inventory is to count by location. This will uncover parts that have been misplaced and other surprises lurking on the shelves. The process works by obtaining a perpetual inventory listing by inventory location. This assumes that locations are uniquely identified. Identifying specific locations assists in finding the exact location of the part. An easy method for identifying locations is the descending relationship. If multiple storerooms are used the first digit could be the location of the storeroom. Alphabetic characters work well and give ample uniqueness with one digit. The next set of characters is the shelf in which the parts are stored. Usual two digits are sufficient. The next digit is the shelf, starting at the bottom with zero or one. Additional specifics can be built in with the location on the shelf. For example a part stored in B2313 is stored in stockroom B, on rack 23, on the first shelf in the third position. A part in C0501 is in stockroom C, on rack 5, on the bottom shelf in the first position. With very short identifiers, over 200,000 locations can be uniquely identified and parts are easier to find because the system is very consistent, predictable, and simple. This declining significance method supports easy production of a report that lists inventory by expected location. Once this report is produced, the storekeeper takes it to the stockroom and begins to validate the inventory. If the parts are easy to count or there is an obvious error, an actual count is performed. If the parts are difficult to count and there is no obvious error, the part is bypassed. For example, when looking at location C2301 there is a quantity of 7 parts of item 12345. The storekeeper validates that part 12345 is indeed in location C2301. Since 7 is an easy number to count, the count is validated or error noted and reported back to the perpetual system. Moving to location C2302, the bin holding part 12378 should contain 8794 parts. When looking at the bin the storekeeper can see that there is indeed a large number of parts, in fact 8794 seems reasonable and counting them would take at least 15-20 minutes. Since spending all that time does not add any value, these parts are bypassed. No count is entered for part 12378 and the storekeeper moves to location C2303 where the bin holding part 24536 should have 9703 parts. Upon examination, the bin is holding only about 100 parts. The storekeeper makes an exact count and notes the discrepancy for future problem solving. Using this method storekeepers can verify many more parts than counting every part in its location. Since the process of cycle counting is to validate the inventory control process, the ability to collect more data about the accuracy of the inventory and the reason for possible inaccuracy is better than slogging through ugly tedious counts of parts that look most likely correct anyway. The down side of this approach is that it takes a judgment call on the part of the storekeeper. Some managers don't believe in even letting the storekeepers see the perpetual inventory counts when doing cycle counting. The reality is that the storekeepers are the most motivated to have accurate inventory and using proper measurements systems will respond with overall process improvement for inventory accuracy rather than spending the time and effort attempting to circumvent the system. Everyone is a winner. Allowing the storekeepers this judgment really puts the control in the correct hands -- the process owner who knows most about it.

Continue to resolve process issues: As problems arise resulting in inaccurate perpetual inventory records, the process issues must continue to be identified and resolved. According to Deming, 94% of the process issues arise from the process itself, only 6% come from people. Don't be too quick to blame an operator for the error when in fact there is an underlying process issue. The most difficult ones to resolve are simplified forms and transactions. Having simple tools enhances inventory accuracy dramatically. The inventory process must be simple enough so that it is easier to do it correctly than to circumvent the system. The simple solution is always the hardest to achieve. Also, remember that the less inventory that is in the plant, the easier it is to count. In fact, many world class facilities count all their inventory every week and take only about an hour!

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For additional information, please contact www.demanddriveninstitute.com