MAXIMO KPI GUIDE SERIES

Dead Stock Exposure

Self-Assessment

Six questions to estimate how much of your MRO inventory value is tied up in parts that will never be used.

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What Is Dead Stock?

Dead stock is inventory that has no consumption history and no foreseeable demand. It sits on the shelf, occupies bin space, carries insurance and carrying cost, and contributes nothing to maintenance operations. It is not the same as slow-moving stock (items that turn infrequently but have a legitimate future need) and it is not the same as insurance spares (items held deliberately against low-probability, high-consequence failures). Dead stock is material your organization will almost certainly never use.

Every storeroom has some. The question is how much, and whether you know the difference between dead stock, insurance stock, and active stock that just happens to move slowly. Most organizations cannot answer that question without running the analysis, and most have never run the analysis.

THE FORMULA

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Dead Stock % = Dead Stock Value / Total Inventory Value x 100
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EXAMPLE

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Dead Stock Value (no issues in 12+ months): $320,000
Total Inventory Value: $2,000,000
Dead Stock %: 16%
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Dead Stock Value is the total dollar value of items in your storeroom with no material issues recorded in Maximo for a defined lookback period, typically 12 months. In Maximo, this means items in the Inventory application with an active status where the last issue date (LASTISSUEDATE) is older than your threshold, or where no issue has ever been recorded. **Total Inventory Value** is the sum of on-hand quantity multiplied by average cost across all active storeroom locations.

You can also calculate Dead Stock % by item count instead of value. Both are useful. The value-based version tells you how much capital is trapped. The count-based version tells you how many bin locations and catalog entries are being maintained for parts nobody uses. Organizations with high dead stock by count but low dead stock by value have a housekeeping problem. Organizations with high dead stock by value have a capital problem.

THRESHOLD NOTE

Twelve months is the standard lookback for identifying potential dead stock, but it is a starting point, not a verdict. An item with no issues in 12 months might be an insurance spare held for a valid reason. The assessment questions below help you distinguish between dead stock and intentionally slow-moving inventory so you do not write off material you actually need.

What Good Looks Like

Most well-managed MRO storerooms carry between 5% and 15% dead stock by value. Below 5% usually means someone is actively managing it. Above 20% means nobody has looked in a while. Above 30%

means the storeroom has accumulated years of project surplus, decommissioned equipment spares, and items that were ordered once for a job that never repeated. These are working references, not research claims. Your number depends on your industry, your equipment age, and how long your storeroom has been operating without a formal review cycle.

The Assessment

Each question targets a specific source of dead stock accumulation. If you answer yes to a question, the paragraph below it explains what that usually means for your inventory and what to look at first.

QUESTION 1

Do you have items with no issues in 12 or more months?

This is the baseline question. In Maximo, every material issue creates a transaction in MATUSETRANS with an issue date. Items where the last issue date is older than 12 months (or where no issue has ever been recorded) are your initial dead stock candidates. On a typical storeroom that has been operating for five or more years without a formal review, 15% to 30% of active item records will fall into this category. Not all of them are truly dead. Some are insurance spares, some are seasonal, some are tied to PM frequencies longer than 12 months. But this is where you start. If you cannot run this query against your own data today, that is the first problem to solve. You cannot manage what you have not measured.

QUESTION 2

Do you know the split between insurance spares and active stock?

Insurance spares are parts held against low-probability, high-consequence failures: a transformer bushing, a reactor coolant pump seal, a compressor crankshaft. They are expensive, they sit for years without moving, and they are supposed to. The problem is that most organizations do not formally classify their insurance spares separately from active inventory. Without that classification, your dead stock analysis cannot distinguish between a $40,000 pump impeller held deliberately for a critical asset and a $40,000 pump impeller for equipment that was replaced three years ago. Both show zero consumption. Only one is dead stock. If your storeroom does not have an insurance spare flag, commodity group, or ABC override that separates these items, your dead stock percentage is unreliable in both directions: it overstates dead stock by including legitimate insurance items, and it understates the problem by giving everything with zero consumption the benefit of the doubt.

QUESTION 3

Can you identify inventory tied to retired or decommissioned assets?

This is the single largest source of dead stock in most storerooms. Equipment gets replaced during capital projects, modified during reliability improvements, or abandoned in place when a production line shuts down. The asset record in Maximo gets decommissioned or marked inactive. But the spare parts for that equipment stay in the storeroom because nobody connects the inventory review to the asset lifecycle. A 10-year-old plant that has been through two major equipment upgrades can easily carry 10% to 15% of its inventory value in spares for assets that no longer exist. The fix requires linking your spare parts (through item assembly structures, spare part records, or where-used relationships) to asset records and then checking the status of those assets. If the asset is decommissioned and the part is not used on any other active asset, it is a dead stock candidate.

QUESTION 4

Are any reorder points set higher than annual consumption?

Reorder points and min/max levels are set once and rarely revisited. When an item was first stocked, someone estimated demand and set a minimum quantity. Over time, consumption patterns change: equipment gets more reliable, PM frequencies shift, a vendor changes the part number and the old item stops moving. But the reorder point stays where it was, and every time the balance drops below the minimum, the system generates a reorder. The result is a slow, invisible accumulation of excess. You end up with 25 units on the shelf for an item you use 3 per year, because the min was set to 10 five years ago when consumption was higher. Multiplied across hundreds of items, this pattern can represent a significant portion of your inventory value. In Maximo, you can compare the MINLEVEL field on the Inventory record against actual issue history from MATUSETRANS to find these mismatches.

QUESTION 5

Do you have leftover material from completed projects or turnarounds?

Projects and turnarounds generate bulk material purchases. A turnaround might require 200 gaskets of a specific type, but the vendor minimum order is a box of 500. After the turnaround, 300 gaskets go on the shelf. A capital project orders specialty fasteners, fittings, or instrument components for a one-time installation. The leftovers get received into the storeroom with no future demand. This pattern repeats across every major project and every turnaround cycle, and it compounds over time. Organizations that have been through five or more turnarounds without a post-project inventory reconciliation can carry substantial project surplus disguised as normal stock. The items often have valid part numbers, valid descriptions, and active status in the catalog. They just have no future demand.

QUESTION 6

When was the last time you reviewed your ABC classification?

ABC classification assigns management priority based on consumption value: A items are your high-value, high-consumption parts that warrant tight controls, B items are moderate, and C items are low-value, low-attention. The problem is that ABC is a snapshot. It reflects consumption patterns at the time it was calculated. If your ABC classification has not been updated in two or more years, your storeroom strategy is built on stale data. Items that were A-class movers may now be C-class or completely dead because the equipment they support was replaced. Items that were C-class may now be critical because a new asset brought new demand. Without a current ABC, your cycle count program, your reorder review priorities, and your dead stock identification all operate on assumptions that no longer match reality. Updating ABC annually based on trailing 12-month consumption is the minimum. Updating it after any major equipment change is better.

Reading Your Results

YES ANSWERS	LIKELY EXPOSURE	WHAT IT MEANS
0 to 1	Under 10%	Your storeroom is actively managed. Validate with data.
2 to 3	10% to 20%	Common range. Targeted review will recover capital.
4 to 5	20% to 30%	Significant capital trapped. Formal review recommended.
6	30%+	Years of accumulation. Inventory rationalization project warranted.

These are directional estimates, not precise measurements. The only way to know your actual dead stock percentage is to run the query against your data. But if you answered yes to three or more questions, there is almost certainly enough trapped capital in your storeroom to justify the effort of finding out.

Do not dispose, write off, or obsolete parts based on this assessment alone. Use it to prioritize which items to review first.

The Connection to Inventory Turns

Dead stock is the single biggest drag on Inventory Turns. Every dollar of dead stock sits in your Average Inventory Value denominator, pulling your turns number down without contributing anything to the numerator (because dead stock, by definition, never gets issued). An organization with $2 million in total inventory and $400,000 in dead stock is calculating turns against $2 million when the storeroom is really only working with $1.6 million. Remove the dead stock and your effective turns jump immediately, without changing a single reorder point or purchasing decision. That is why dead stock analysis is the first step in any inventory turns improvement effort, not the last.

Best Next Action

Pull a list of every item with no issues in 12+ months. Sort by extended value (on-hand quantity times average cost), highest first. Check the top 20 items against the asset records they support. If the assets are active and the items are insurance spares, reclassify them. If the assets are retired, you found your dead stock.

Maximo fields to pull: Item Number, Description, Storeroom, Current Balance, Average Cost, Extended Value, Last Issue Date, Stock Category, ABC Type, Where Used (assets/locations), Asset Status, Reorder Point / Min / Max

Go Deeper: The Inventory Turns Guide

This self-assessment tells you where to look. The full **Maximo KPI Guide: Inventory Turns** covers Dead Stock % as a companion metric alongside Inventory Turns and Part Stockout Rate. It includes the Maximo queries for all three metrics, the segmentation methodology (by ABC classification, storeroom, commodity group, and equipment criticality), the drilldown diagnostic from aggregate to root cause, KPI Manager configuration, and the business case scenarios to justify a formal inventory review.

Available on Amazon.com.

See also: Inventory Turns Industry Benchmark (free download at brockindustries.io)

Quick Maximo questions are always free. Reach out on LinkedIn at linkedin.com/in/brockjason. I never charge for chatting.

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