

Transforming Inventory into Value: Meeting the Evolving Needs of Construction and Engineering Firms

Why Inventory Management is the Hidden Lever for Project Success

For construction and engineering firms, inventory is more than a line item on the balance sheet; it is the engine that keeps projects moving, teams delivering, and ideas turning into reality. Yet, in a landscape where materials must arrive at the right place and the right time, inventory can also be the root cause of costly delays, unexpected expenses, and missed opportunities.

When inventory is mismanaged, cash gets trapped in unused materials, project timelines slip, and working capital shrinks. In a highly competitive industry, effective material management is not just operational; it is strategic.



IOC Construction | Acumatica Customer

Guide to Smarter Inventory Management



**The Hidden Cost
of Inefficient
Inventory**



**The Inventory-
to-Cash-Flow
Equation**



**Why Basic
Tools Fall
Short**



**What Modern
Inventory
Strategy Enables**



**Pathway to
Smarter Inventory
Management**

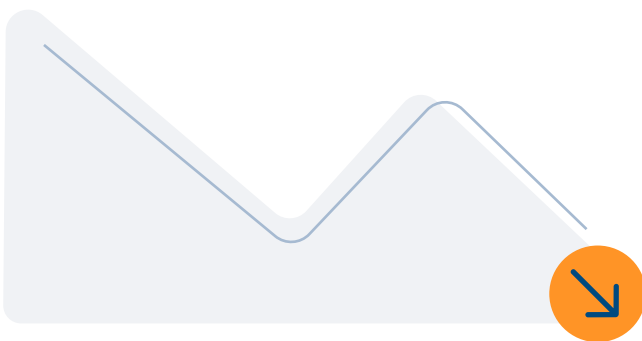


The Hidden Cost of Inefficient Inventory

Unlike traditional businesses with centralized storage, construction and engineering firms navigate a decentralized, fast-moving environment. Materials travel between warehouses, job sites, and field offices. The result? Unique inefficiencies, often hidden from view.

Common signs of inventory challenges:

- Excess or unused materials accumulating at project sites, warehouses, or storage yards.
- Delays caused by missing or late-arriving components.
- Manual processes like spreadsheets or paper logs lead to lost or forgotten inventory.
- Surpluses at one location while another site faces shortages.



Envent Engineering | Acumatica Customer

Impact of inefficient inventory management

Every steel beam, sensor, or fastener sitting idle represents untapped capital. Capital that could fuel new bids, pay staff, or drive innovation. Idle inventory costs businesses in three significant ways: wasted spend, missed opportunities, and burdensome carrying costs.

Carrying costs, the total expenses incurred to hold and maintain inventory, can be substantial, typically representing 20-30% of total inventory value. These costs include storage, insurance, taxes, depreciation, and capital costs (opportunity costs). Managing these effectively is critical to maintaining profitability.

“Acumatica has proven to be a solution for our company with multiple needs. We handle construction projects, schedule service calls, manage inventory, run billing, pay bills, and process payroll. All of these sides of the company are combined in one system, which has been very useful.”

– Brian Zelinski, IT Consultant, TM Heating and Cooling



The Inventory-to-Cash-Flow Equation

Think of inventory as a finely tuned gauge balancing two extremes. On one side: shortages, which slow down crews and force costly emergency rush orders. On the other: surpluses, which consume resources and tie up working capital.

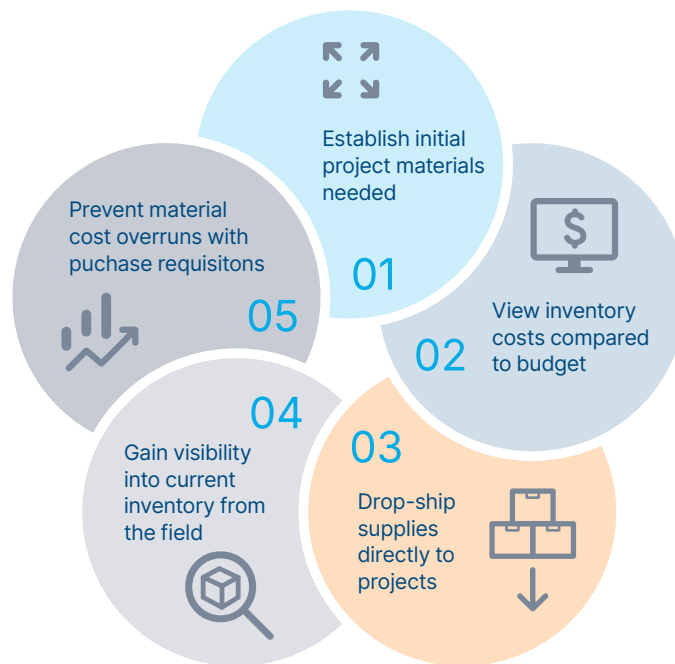
Achieving balance is an ongoing challenge for construction and engineering leaders, where:

- Complexity grows with each added job site, subcontractor, or specialized project requirement.
- Overstock and stock outs are both expensive, whether through storage costs, theft, or delayed billing.

The goal is clear: Align inventory levels as closely as possible with real project needs, so that projects progress smoothly and firms remain agile.

Project Inventory Lifecycle

This infographic outlines a five-step process: identifying material needs, comparing costs to budget, drop-shipping supplies, tracking inventory in the field, and preventing cost overruns. Its circular design highlights the iterative nature of efficient inventory management.



“Having worked with Acumatica, I can say it’s been a pivotal tool for our business. The platform’s design caters to small and mid-sized companies like ours, making inventory management a breeze. The detailed analytics on production and BOMs is impressive, allowing us to focus more on our core passions. It’s a supportive community driving innovation and growth.”

– Dakota Mitchell, Production Manager, Envent Engineering



Why Basic Tools Fall Short

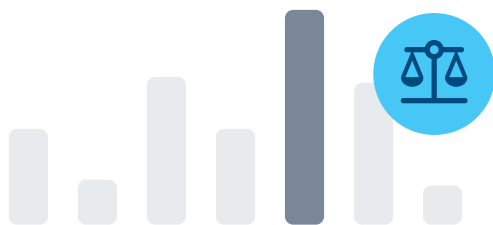
Many teams begin with spreadsheets, basic accounting systems, or siloed point solutions. While these might work for a single location, the approach falls apart when teams scale or projects diversify.

Limitations include:

- No real-time visibility means managers don't know what materials are available across locations without manual tracking.
- Disconnected data between procurement, job costing, and field teams, leads to errors and delays.
- Inability to forecast or anticipate needs across multiple sites and disciplines.
- Inefficient transfer of surplus materials, resulting in both unnecessary purchasing and waste.



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Information Gaps

Simply put: Disconnected or manual processes cannot keep pace with the speed and complexity of modern projects. As firms grow, old systems breed frustration and lost potential.

“Acumatica has helped me properly revolve my inventory to and from roofing projects and saves me from having to track costs via separate transactions. I can run my construction operations much like a distribution hybrid, and Acumatica can always adapt to my needs.”

– Dave Coleman, Purchase Manager, O'Hara's Son Roofing



What Modern Inventory Strategy Enables

Thoughtfully managed inventory converts chaos into control, turning supply chain challenges into a source of competitive advantage.

Key strategies include:



Cross-Location Visibility:

Firms track inventory across every job site, engineering workshop, warehouse, and service truck—unlocking the power to reallocate surplus and prevent double-ordering.



Proactive Planning: Using historic and real-time data, teams predict needs for each project phase or engineering milestone, reducing dependencies on guesswork or emergency orders.



Prefabricated Inventory Manufacturing: Teams can manufacture and manage prefabricated components, tracking raw materials.



Just-in-Time Delivery: Teams align procurement to project schedules, ensuring that materials arrive only when needed and reducing the risk of theft, loss, or damage.



Accurate Job Costing: Materials are tracked from receipt to installation, giving finance and project leaders insights into bill accuracy to keep budgets tight.



Transparent Transfers and Returns: Surplus is identified and reassigned or returned as projects wrap up, promoting sustainable use of resources and cost recovery.

When firms move from firefighting to planning, they free up working capital, reduce storage and shrinkage costs, and boost productivity, giving every team member the confidence that materials will be where they need them, every time.

From Our Customers

Since implementing Acumatica, what has been the reduction in inventory errors or stock discrepancies?

35% less
at The Bosworth Company

20% reduction
at Faith Technologies Inc.



Pathway to Smarter Inventory Management

- 1. Assess Current Processes**
Audit current practices for inefficiencies, bottlenecks, and areas of frequent overstock or stock outs.
- 2. Engage Teams Across Functions**
Foster collaboration between procurement, field operations, and project managers to identify data gaps and streamline workflows.
- 3. Set Clear Inventory Goals**
Align material management strategies with cash flow, project delivery timelines, and long-term business objectives.
- 4. Invest in Scalable Tools**
As operations grow, transition from manual or disconnected tracking methods to integrated, cloud-based platforms that connect office, field, and warehouse seamlessly.
- 5. Measure and Refine**
Use data-driven insights for continuous improvement, helping teams respond faster and more effectively as project conditions change.

Elevate Your Material Management

For construction and engineering firms, effective inventory management reduces risk, unlocks capital, and drives innovation. Centralized, integrated platforms provide real-time visibility and automation, transforming inventory into a growth catalyst. **Discover how a modern ERP solution can revolutionize your inventory management and drive your projects forward.**

Acumatica Cloud ERP is a comprehensive business management solution that was born in the cloud and built for more connected, collaborative ways of working. Designed explicitly to enable small and mid-market companies to thrive in today's digital economy, Acumatica's flexible solution, customer-friendly business practices, and industry-specific functionality help growing businesses adapt to fast-moving markets and take control of their future.

For more information on Acumatica, visit www.acumatica.com or follow us on [LinkedIn](#).