

GUIDE

5 Must-Haves in an Equipment Tracking and Management Solution

Many contractors turn to equipment tracking and management software to help them improve the visibility, maintenance, utilization, and ROI of their construction equipment.

For most specialty and self-performing general contractors, construction equipment—ranging from small generators to jackhammers and bulldozers—represents your largest capital outlay. Without the ability to manage, track, and ensure the proper functioning of these expensive items, you may leave hundreds of thousands of dollars on the table in the form of lost, damaged, or underutilized assets and production delays due to the mismanagement of these high-value assets.

So how can construction companies optimize the usage and minimize the downtime of their equipment?

Many contractors turn to [equipment tracking and management software](#) to help them improve the visibility, maintenance, utilization, and ROI of their construction equipment. The benefits of a comprehensive equipment tracking and management solution include higher asset utilization rates and avoiding job site delays through proactive maintenance, decreased expenses, and increased productivity due to optimized scheduling and maintenance of these important assets. In this guide, we'll look at five key capabilities you should look for when purchasing an equipment tracking and management solution, as well as the benefits of proactively tracking and managing your equipment.

Before diving into the most important features of an equipment tracking and management solution, it's important to understand how equipment tracking differs from tool tracking.





Look for robust equipment tracking capabilities that allow you to monitor your organization's resources and ensure that all your assets deliver a return on investment.

How Equipment Tracking and Tool Tracking Differ

The terms “tools” and “equipment” are often used interchangeably on job sites. However, some key differences exist. Tools include items like hammers and shovels that are generally used by hand. Equipment typically costs more than tools and has higher service and maintenance requirements and greater productivity potential.

Though both tool-tracking and equipment-tracking solutions are designed to help you reduce downtime, boost productivity, and maximize asset utilization rates, equipment-tracking systems must account for the following:

- » Because equipment tends to be more expensive than tools, mismanagement can lead to ballooning costs that destroy bottom lines.
- » Equipment—like portable generators, vehicles, and trailers—is generally moved around and transported more than tools. Therefore, equipment requires more precise tracking to be properly managed, or it can easily be misplaced or stolen.
- » Equipment generally requires more maintenance and operator certifications than tools to operate efficiently and meet regulatory requirements.

A robust equipment tracking and management system goes far beyond simply tracking assets, enabling you to get the most from your equipment.

5 Must-Have Features for Equipment Tracking Solutions

When considering an equipment tracking and management solution, you should look for the following capabilities:

1. Comprehensive Location Tracking

Contractors with multiple job sites can struggle to manage assets across multiple sites and keep track of where their equipment is located. Because of this, the foundation of any asset management solution you consider should be location tracking. Look for robust equipment tracking capabilities that allow you to monitor your organization's resources and ensure that all your assets deliver a return on investment. Solutions should also ensure that expensive equipment isn't stolen or lost, requiring additional capital outlays for replacements.

Ideally, equipment tracking software solutions should integrate data from your GPS provider so that you may view the exact location of your high-value equipment.



Modern equipment tracking systems can rely on GPS, [barcode](#), [RFID](#), and [BLE tracking technology](#) to **seamlessly track equipment without needing extra oversight from workers on the ground**. Automated technologies like these also reduce the possibility of human error associated with less high-tech tracking solutions.

Ideally, equipment tracking software solutions should integrate data from your GPS provider so that you may view the exact location of your high-value equipment, such as yellow iron and other rolling stock. Other important tracking features include the ability to [assign and transfer assets among projects](#) and designate responsible parties to **ensure you know which job site your assets are on and who is responsible for them**.

Real-time updates and a centralized dashboard enable you to know where your high-value equipment is at all times and provide visibility that [drastically simplifies asset management](#) and can reduce delivery times for equipment from days and weeks to hours and minutes.

To learn more about how Saulsbury Industries streamlined fleet and heavy equipment management, read their Case Study, "[Saulsbury Deploys Holistic Construction Asset Management With Align.](#)"

2. Job Costing and Billing

The second key functionality you should look for in an asset management solution is the ability to automate the [costing and billing of assets](#) to jobs based on time on the job site, number of hours utilized, or other usage metrics. Strong job cost and billing capabilities save your teams' time and ensure you **accurately charge your clients and/or internal cost centers for assets used**, which means charges go out in a timely manner, and clients get more accurate invoices. Field and warehouse personnel can focus on supporting and completing projects instead of tedious administrative tasks.

Keys to look for in job cost and billing functionality are flexible rate sheets that support a number of costing and billing structures to meet the needs of different types of assets and projects, as well as [accounting/ERP integration](#) so data can automatically flow into your billing systems.

3. Maintenance and Certification Management

An effective equipment management solution should include features to [streamline maintenance processes](#). With the assistance of digital tracking, you have the chance to prevent equipment problems and breakdowns before they start, preventing costly job site disruptions. This capability is vital to extend the lifespan of equipment assets and ensure they operate at peak performance and safety levels. Such capabilities may include preventive maintenance scheduling, work order management, and tracking repairs and maintenance history.

Job costing and billing are important areas in which reporting and analytics can positively impact operations.

When considering an asset management system, you should evaluate whether the software offers customizable maintenance workflows and notifications to optimize equipment maintenance.

This includes the capabilities to:

- » Schedule maintenance and service requirements
- » Complete compliance inspections and calibrations
- » Receive automated service notifications
- » Capture complete service history

Furthermore, comprehensive systems track employee certification management so that you can quickly determine which employees are certified to operate specific pieces of equipment.

To see how Gastier M.P., Inc. tracks and schedules equipment oversight and inspections, download their Case Study, “[How Align Powers Gastier’s Lean Construction Operations.](#)”

4. Reporting and Analytics

Consider software that [provides powerful reporting and analytics](#) features. Look for the option to generate customized reports and gain insights into key metrics, such as equipment utilization, maintenance costs, and performance trends. Advanced analytics equips you to make **data-driven decisions and identify areas for improvement** in your equipment management processes.

Job costing and billing are important areas in which reporting and analytics can positively impact operations. Comprehensive asset management solutions will enable you to accurately charge equipment to the correct job and capture the ROI for high-value equipment.

Job costing functions offer a variety of methods for charging your equipment, including fixed-rate or automated billing, usage-based billing models, and set maximum billing amounts.

The system should offer on-demand reporting of equipment charges and the ability to create custom-scheduled reports on equipment billing for each job. Ideally, the job costing and billing capabilities [will integrate with third-party accounting/ERP systems](#) to save time and eliminate billing errors.



Accurately tracking and managing expensive assets is crucial to overall business health since buying multiples of the same equipment isn't feasible for construction firms wanting to keep expenses low.



5. Internal Supply Chain Management

Construction companies have complex internal supply chains and need operational solutions that can adequately keep field teams and projects supplied with the assets they need when they need them. Operationally, firms must manage tasks ranging from moving countless tools, materials, and assets to, from, and in-between job sites and warehouses to [inventory management](#) and [maintenance scheduling](#).

Without a state-of-the-art equipment management system, the energy, resources, manpower, and time needed to track these moving pieces accurately can be overwhelming. Accurately tracking and managing expensive assets is crucial to overall business health since **buying multiples of the same equipment isn't feasible for construction firms** wanting to keep expenses low.

Older asset management systems use simple utilization formulas to track equipment conditions and perform billing functions. However, these formulas rely on significant numbers of assumptions that may be incorrect when applied to larger inventories of assets, resulting in unexpected breakdowns and lost inventory without warning. [Modern equipment tracking and management systems empower you to improve the management of your fleet](#), ensuring that assets will be ready to work at full capacity without sacrificing safety or risking unexpected breakdowns or delays.

A robust asset management system not only significantly decreases the number of resources needed to track and manage asset location and movement, it also automates many of these processes to save time, remove the element of human error, improve job cost and billing accuracy, and save money while improving organizational efficiency across field, warehouse, and back office teams.

Such systems also improve job site safety standards by automatically recording and monitoring equipment conditions and notifying warehouse staff whenever equipment falls below certain safety standards or approaches the end of its useful life cycle.

Key Benefits of Equipment Tracking and Management

Let's look at some of the most important benefits of effective [equipment tracking and management](#):

1. Improved Operational Efficiency

A robust equipment tracking solution will enable you to analyze the movement of equipment from purchase through transfers between job sites and warehouses, helping to avoid delays and safeguard essential equipment from being lost, misplaced, or stolen.

**Effective management
of your expensive
equipment will lower
operational costs.**

Besides tracking the physical location of an asset, equipment tracking and management solutions can also automatically assign the appropriate personnel to tasks when maintenance work orders are created, for example, and [alert managers when stock runs low](#), ensuring your workers have the equipment they need when they need it.

The result? Reduced delivery times, improved equipment utilization, higher productivity, and lower expenses.

2. Better-informed Decision Making

Equipment tracking and management software collects and stores a wide range of data you can leverage to guide strategic decision-making. For example, the GPS telematics used by modern asset management systems tracks equipment utilization and location and condition so that contractors may optimize equipment use while ensuring accurate billing.

These systems store asset information, such as equipment age and condition, as well as inventory data that is invaluable for efficiently managing inventory, safety standards, equipment, and [tool cribs](#). Plus, analytics and reporting features can quickly identify trends and accurately provide important information like calculating machinery depreciation.

3. Reduced Capital Expenditure

Effective management of your expensive equipment will lower operational costs. By using equipment tracking software to help you manage the lifecycle of your equipment, you are more likely to save money, have the necessary equipment in working order for your crews, and better manage the depreciation of new purchases. Additionally, the ability of warehouse and back-office teams to track the location, condition, and movement of valuable equipment allows assets to be where they are needed most, helping to avoid unnecessary expenses from duplicate equipment purchases.

4. Utilization Optimization

Equipment management software boosts job site productivity and helps prevent breakdowns through proactive management of maintenance schedules. It will help you efficiently manage the lifecycle of your equipment so that you'll know when it's due for service, maintenance, or inspection, how often employees use it, and whether it needs to be replaced or upgraded due to wear and tear.

Is your business suffering astronomical losses on construction projects? Let us show you how Align improves efficiency, safety, and profitability for your organization. **Contact our team today to schedule a product tour.**

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Conclusion: Transforming How Construction Companies Operate

Technological advancements disrupt the construction industry for the better by unlocking new and more efficient ways of building that bring costs and project timelines down—driving productivity, quality, and safety up—and improve construction companies' competitiveness and profit margins.

Robust equipment management systems—those that go beyond just tracking equipment locations—are one of the key technologies driving transformational change. Beyond providing the location of your assets, modern equipment tracking and management solutions deliver the other capabilities needed to manage equipment to maximize utilization and ROI operationally.

Consider the must-have features outlined in this guide when searching for your next equipment tracking and management software to ensure you end up with one that meets your specific needs to get more value from your equipment assets.

Interested in learning more about incorporating equipment tracking and management into your organization? [Book a Demo.](#)

